The British Museum

The Snettisham Hoards

Volume I

Edited by Julia Farley and Jody Joy

Research
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225

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Edited by Julia Farley and Jody Joy

With contributions from Ian Stead and Sophia Adams, Janet Ambers, Caroline Cartwright, Mike Cowell, Paul Craddock, John Davies, Michael de Bootman, Philip de Jersey, John Fenn, Eleanor Ghey, Marilyn Hockey, David Holman, Duncan Hook, Susan La Niece, Janet Lang, Alice Lyons, Peter Makey, Nigel Meeks, Aude Mongiatti, Peter Northover, Daniel O'Flynn, Sarah Percival, Alan Pipe, Matthew Ponting, Fleur Shearman and Tony Spence

The British Museum

Publication supported by:

Eyre Family Foundation

The Pennycress Trust

Publishers
The British Museum
Great Russell Street
London WC1B 3DG

Series editor
Sarah Faulks

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ISBN 978086159 2258
ISSN 1747 3640
doi 10.48582/3xdb-ns12

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Front cover: The torcs of Hoard L *in situ* in the hoard pit. Photograph taken during the British Museum excavations in 1990
Pg. iv: aerial shot of Snettisham village, 2023. Image © Rod Trevaskus
Pg. vi: close up view of torc fragment S.13 showing anthropomorphic decoration

Printed and bound in the UK by 4edge Ltd, Hockley

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Acknowledgements

Snettisham has a long history. So many hours of human effort have been poured out in libation to this phenomenal site that it would be impossible to mention everyone who has left a mark on this volume. Nonetheless, as the editors, we have done our best here to attempt a list of thanks. We are so grateful to you all.

In some ways this book, of course, begins with those first finds at the site in the 1940s and 1950s. Everyone from the ploughmen and foremen who initially reported the finds, to the director of the Norfolk Lavender Company who called in Norwich Castle Museum (NCM), set the story in motion. The Curator of Archaeology at NCM, Roy Rainbird Clarke, led the first excavations. In the 1970s, Barbara Green from NCM carried out a survey at the site and in the 1980s the Norfolk Archaeological Unit (NAU, subsequently known as Norfolk Landscape Archaeology), who would go on to play a crucial role in the later digs, carried out a detailed fieldwalking exercise.

The British Museum (BM) project which ultimately led to this publication began with Dr Ian Stead. In 1990, when Cecil 'Charles' Hodder made the discoveries that would prompt the BM excavations, Stead was the Deputy Keeper of the Department of Prehistoric and Romano-British Antiquities. He went on to lead large-scale investigations of the site during three successive seasons in 1990, 1991 and 1992. The importance of his contribution to the story of Snettisham cannot be overstated.

Like any excavation, innumerable hands came together to run the digs at Snettisham. Stead's 1990–1 excavation team included BM staff members Tony Spence (Department of Prehistoric and Romano-British Antiquities), Dave Webb (Department of Photography) and Simon Dove (Department of Conservation). Tony Pacitto operated survey equipment and assisted in the direction of the excavations. Charles Hodder worked throughout as a full member of the team, lending his considerable skills as a detectorist. The core team also included Peter Makey, Ian Blomeley, Tim Compton and other volunteers, some provided by the NAU, where the main contacts were Andrew Rogerson and David Gurney. Derek Edwards dealt with air photography, while Dave Miller drove the bulldozer that towed the box scraper. Mike Cowell (from the BM Research Laboratory) organised an extensive phosphate survey. In the 1992 season, Neil O'Loughlin and Dave Webb supervised the trenches while Sheelagh Stead ran the finds shed. A rota of BM warders guarded the site around the clock to provide much needed security. The excavations were made possible by the support of Sir Stephen and Lady Lycett Green, the Trustees of the Ken Hill Estate, and the farm manager, John Austen. It is thanks to all these individuals, and many more besides, that we now have the archaeological records that enabled the publication of this book.

Following the completion of his fieldwork at Snettisham, Stead worked towards writing up his excavations and all the previous discoveries made at Ken Hill. He retired in 1996 but continued to work on the publication alongside various other projects until 2009. At this time, he had made significant progress in terms of drafting the catalogue, reporting on the excavations and history of discoveries, and

compiling a gazetteer of other torcs from the British Isles. When he left the Museum, Dr Stead generously left us a copy of his work in progress. He also consented for his account of the excavations to be included in the finished book and it is presented here as Chapter 2. We extend our thanks to Dr Stead for bearing with us through the ups and downs of this project. None of it would have been possible without him.

Work on the Snettisham assemblages continued under one of the present editors, Jody Joy, then curator of the British and European Iron Age collections. The records made by Ralph Jackson and Duncan Hook at the time Hoard F came to the British Museum were particularly helpful in carrying out this work. We are also very grateful to Jody's volunteer Alice Thompson, who assisted him in weighing, measuring and recording the material. She is one of the few people in the world who has seen so many objects from the site. Ola O'Brien and other volunteers later assisted Julia in the same manner.

As specialist reports were commissioned, a wider group were brought together to publish the site. Alice Lyons picked up Val Rigby's work on the Roman pottery, while Sarah Percival took on the prehistoric pottery. Peter Makey, who had long remained guardian of the flint assemblage from the site, took on the lithics. Animal bone was covered by Alan Pipe from MOLA, and Sophia Adams and Derek Hamilton provided generous advice on the new programme of radiocarbon dating. Sophia also went on to complete a specialist report on the brooches. Michael de Bootman kindly allowed us to include information from his later geophysical surveys. Finds have continued almost down to the present, and we would like to thank later detectorists S. Brown, K. Elfleet and K. Jackson who undertook a survey of the wooded area, and Natasha Hutcheson and the team who investigated the Romano-Celtic temple site in 2004.

As this work was unfolding, the comprehensive scientific examination of the material in the British Museum's Department of Scientific Research was ably led by Nigel Meeks and later assisted and managed by Aude Mongiatti. This scientific analysis was a crucial part of the investigation of the assemblages from Snettisham and forms a core part of this book. Caroline Cartwright's work has been critical to our understanding of torc manufacture and she has been a very supportive presence throughout the course of the project. Many other members of the Department of Scientific Research at the British Museum also made significant contributions to the project over the years, including Janet Ambers, Paul Craddock, Duncan Hook, Susan La Niece, Janet Lang and Dan O Flynn. We also thank Carl Heron for steering the project through the final publication stages. Metalworker John Fenn worked with Nigel Meeks to help reveal the intricacies of wire torc manufacture, being very generous with his time and expertise. Peter Northover, with Oxford University student Emma Stone, analysed the composition of objects at Norwich Castle Museum, work begun at the instigation of the then curator, Barbara Green. Matthew Ponting carried out an analysis of some of the Snettisham coins, which he has kindly allowed us to reproduce here. Scientific knowledge and new analytical technologies are constantly evolving, and we thank Tess Machling and Roland Williamson for their suggestion to X-ray the Great Torc in 2016 as they began their important research into the construction of this object and other similar torus torcs.

Conservation work was also important in shaping our understanding of the Snettisham finds. With her wonderful piecing together of numerous small fragments of copper alloy, rather like an archaeological jigsaw, Fleur Shearman identified the copper alloy helmet from Hoard F. Marilyn Hockey also restored some of the decorated torcs, revealing the complicated ornament. Ian MacIntyre created a replica of the Great Torc which has been of enormous use for study and teaching, as well as understanding the manufacture of these complicated objects.

Many of the decorated torcs were beautifully drawn by British Museum illustrator Jim Farrant. After Jim retired, first Stephen Crummy and later Craig Williams picked up the project. Stephen brought his considerable enthusiasm, as well as some innovative techniques to record the helmet. Craig has been a stalwart, contributing his enormous artistic talent and a level of technical skill which we believe is unsurpassed. Craig is a brilliant colleague and friend and has been a vital contributor to the volume, providing many insights which have substantially improved this publication.

Photography of objects was undertaken by British Museum photographers David Agar, Kevin Lovelock, Ivor Kerslake and Saul Peckham. John Williams organised and facilitated the work. We are especially grateful to Kevin Lovelock for being such a good companion to Jody on trips to Norwich to photograph artefacts from Snettisham held at NCM. This was another key element of the project, and this publication would not have been possible without the access to the NCM collections provided by John Davies and Tim Pestell. For both the editors, it has been a highlight of our careers to work so closely with John and Tim, and we have each learnt a great deal about curating from both. Alongside John Davies, Amy Seaman also made an important contribution in terms of producing the catalogue of artefacts from Snettisham held at NCM, unravelling in the process several puzzles left over from Rainbird Clarke's original publication. Adrian Marsden is thanked for lively discussions about the coins.

As the publication progressed, remaining object photography and the enormous task of laying out the catalogue plates was taken on by the wonderful Rod Trevaskus. Rod brought order to a chaotic mass of photos, allowing the hoards and stray finds to be seen and understood in their entirety for, perhaps, the first time since they were in circulation in Iron Age Norfolk. He was also incredibly patient with the long process of editing and fine tuning. As his interest in the site grew, ever undaunted, Rod took to the skies and got his pilot's license. You can see one of his aerial photos of the site at the start of volume 1.

A word should also be said about the amazing Collections Care team at the Department of Britain, Europe and Prehistory at the BM for their work in wrangling the notoriously difficult Snettisham collection. A mere glance at the pages of the catalogue will confirm what a daunting task this is! Various people helped over the years, but we would particularly like to thank James Baker, Elena Jones, Jim

Peters and Sam Wyles. James showed incredible patience in terms of transporting items between departments. Elena Jones, Jim Peters and Sam Wyles also helped locate items hiding in plain sight. Registrars, including Marta Mroczek, supported the documentation of the finds. We would also like to thank Ben Roberts, who was the office mate and fellow curator to both editors at different times. Our colleague in the then Department of Coins and Medals, Ian Leins, was also very supportive, contributing invaluable advice and insights, particularly regarding Iron Age coinage. After Ian's departure from the BM, curator Eleanor Ghey ably took on the work of publishing the coins, dealing with this other very daunting assemblage with her characteristic scholarly flair, pragmatism and good humour. David Holman made a study of the potin coins, and Philip de Jersey has generously allowed us to reproduce here his work on Hoard P. Thanks for earlier work on the coins are due to Amanda Chadburn and Andrew Burnett.

Many other colleagues and former colleagues at the British Museum have provided advice, help and encouragement over the years, including: Silke Ackerman, Sophia Adams, Alexandra Baldwin, Sue Brunning, Ollie Cooke, Chris Entwistle, Richard Hobbs, Sonja Marzinzik, Ralph Jackson, Stuart Needham, Val Rigby, Naomi Speakman, Mansell Spratling, Gill Varndell, Neil Wilkin and the much-missed Ross Thomas. Roger Bland, Jill Cook, Leslie Webster and Jonathan Williams, as Keepers of the Department of Britain, Europe and Prehistory, provided valuable advice and support. A special word should be said here about our fondly remembered colleague Ralph Jackson, who was not only the first person at the British Museum to begin work on processing Hoard F, but also in his long and distinguished career supported and mentored both editors as they began theirs. Ralph helped make us the curators we are today.

Beyond the walls of the British Museum, many other colleagues across the UK and beyond have helped to shape the book you hold in your hands with their generous words of insight, encouragement and advice. They include Barbara Armbruster, Mary Cahill, Tim Champion, John Creighton, Mary Davis, Rose Ferraby, Duncan Garrow, Melanie Giles, Martin Goldberg, Chris Gosden, Colin Haselgrove, Jason Hawkes, Fraser Hunter, Yvonne Marshall, Vincent Megaw, Tom Moore, Niall Sharples, Alison Sheridan, Fraser Sturt, John Talbot and Julian Whitewright. We cannot thank you enough.

Throughout nearly all our time working in earnest on the project, the editors have been enormously fortunate to work with our editor at the British Museum, Sarah Faulks. Sarah has been the driving force behind the publication, providing just the right mix of friendly encouragement and cajoling necessary to keep such a large and unwieldy project moving. This book was decades in the making, and it exists now because of Sarah.

Another person we would like to single out for special thanks is JD Hill. Throughout the long history of the project, as Head of Research at the British Museum, JD has fought for the Snettisham publication, finding funding when it was needed and providing invaluable support and encouragement. He also has high standards. His comments on previous drafts were some of the most challenging to remedy, but they have also substantially benefitted the final product.

The same is true of our peer reviewers, Andrew Fitzpatrick, Adam Gwilt and Marcos Martinón-Torres, all of whom gave invaluable feedback on earlier drafts, significantly improving the book, and have been incredibly generous with their expertise. The editors are also extremely grateful to Rachel Tyson for her meticulous copyediting of the manuscript and to Nicola King for the magisterial index. All mistakes, of course, remain our own. The high production values of the publication have only been made possible through funding from the Eyre Family Foundation and The Pennycress Trust and we offer our thanks to both funders for their generosity.

So many others have been part of the Snettisham story over the last almost 80 years since the first finds were unearthed that it is not possible to name and thank them all here, but please know that we are incredibly grateful to everyone who has lent their time and energy to making this publication a reality.

All that is left for us as the editors to say is this: this book is for you. Whether you have been eagerly awaiting its publication for decades or have never heard of the site, as you hold this book in your hands or read it on your screen you, too, are now part of the story of Snettisham. This publication has been a long time in the making, involving many people, but it does not mark the end of work on the site. Rather, this is a new chapter. We hope that sharing the finds, and new discoveries about how they were made, worn, used and deposited, will allow other scholars to now take up the mantle. Snettisham, surely, still has many secrets left to tell. We look forward to learning all about them.

Julia Farley and Jody Joy
September 2024

Acknowledgements of individual authors

Julia Farley: Anyone who has spoken to me about Snettisham over the last decade will have heard me talk about The Curse. Whilst that is a story for another day, despite my protestations, there is in fact strong evidence that the publication is not actually cursed at all: the absolute gift that it has been to work with everyone who has contributed to this book, and especially my wonderful co-editors. I have learned so much from you both, and you have turned the many and various tribulations of Snettisham into a pleasure. Jody, I am in awe of your academic insight, deep knowledge of the Iron Age as well as your personal grit and determination to get the project over the line. Sarah, you are an absolute star, and it is thanks to your patience, compassion, dedication and motivation that this book exists. Thank you both.

Huge thanks are also due to my wonderful husband, Andy Merrills, who has patiently and lovingly supported me at every stage of working on the book.

Jody Joy: I have worked on this publication since 2009. Although I left the British Museum in 2014, Julia who took over from my role as Iron Age Curator generously allowed me to continue working with her on the book. Snettisham is unique, and researching and writing about the site and the finds has been a career highlight. I feel incredibly fortunate to have had the opportunity to spend so much time with many fantastically talented people making spectacular discoveries about some of the most fascinating objects I have ever encountered and I want to thank everyone who has made this book possible. At times the pressure to complete it has felt overwhelming, especially during a recent and prolonged period of ill health, but I have been fortunate to have worked with two phenomenal co-editors, Julia and Sarah, who shouldered a great deal of the burden for the project during my illness. Rarely in my life have I met two people so profoundly good at what they do. Julia is one of the most enthusiastic, driven and knowledgeable people I have ever met. Similarly, Sarah has been a constant source of support, as well as possessing the skill and expertise to consistently guide us along the best path to complete the book. They have been good friends in difficult times and I am hugely thankful to them both.

On a personal note, I wanted also to give special thanks to my friend and colleague Mansel Spratling. We have discussed the project many times over the past 15 years and he has always helped guide me in the right direction.

Finally, I am hugely indebted to my wife, Miriam, and my children, Florence and Samuel. Thank you for always being there.

Caroline Cartwright: Thanks are due to the team of colleagues who have been researching Snettisham over the decades for stimulating discussion and collaboration. For the author's fresh wood experiments in August 2018, thanks are due to the following for providing fresh shoots: Rebecca Stacey for willow and elder, Peter Williams for dogwood, Aude Mongiatti for hazel and Margaret Sax for field maple.

Mike Cowell: Thanks are due to Dr M.J. Hughes who took many of the soil samples and to Ms Fiona Lewis (on secondment from Bradford University) who carried out most of the subsequent chemical analyses.

John Davies: Thanks are offered to Amy Seaman for the time and effort she gave to the project and for being a joy to work with. Thanks are also due to Dr Adrian Marsden who undertook the initial identification of the 2003–9 coins.

Eleanor Ghey: Thanks are due to Tim Pestell, John Davies and Adrian Marsden at Norwich Castle Museum; Ian Leins, Richard Abdy, Amelia Dowler and Sam Moorhead at the British Museum for their input as well as Alberto Giannese, Julia Farley and Sarah Faulks. In addition, she would like to thank David Holman, John Talbot, John Sills, Philip Kinns, Marie-Christine Marcellesi and Rod Trevaskus. Thanks also are due to the British Numismatic Society for their permission to partly reproduce the text written by Philip de Jersey from P. de Jersey (2014), *Coin Hoards in Iron Age Britain* (British Numismatic Society Special Publication no. 12).

David Holman: The author would like to thank the staff of Norwich Castle Museum for facilitating access to Hoard C.

Alice Lyons: The author would like to thank Val Rigby (freelance specialist) for her initial work which forms the basis of the Roman pottery report and her comments on the final draft. Thanks are also extended to Julia Farley for her help with bringing this report to publication.

Nigel Meeks, Aude Mongiatti and Daniel O'Flynn: The completion of the scientific work is a tribute to many people at the British Museum across different departments over an extended period of time who have contributed to the Snettisham project. We thank the Friends of the British Museum who generously funded some of the laboratory facilities used in this project. Use of a digital optical microscope, analytical scanning electron microscopes and a high-powered digital radiography suite has been key to unravelling the range and practicalities of the metalsmithing traditions preserved within the fabric of the artefacts from Snettisham. We would also like to thank the following British Museum staff who, over the years, have contributed to the science and understanding of the Snettisham material, notably Paul Craddock, Janet Lang and Quanyu Wang as supporting metallurgists. Carl Heron as the current Director of Scientific Research is thanked for embracing the concluding years of the Snettisham scientific project. We are also grateful to the previous Keepers of the Department who have overseen and supported the research programme. The success of the scientific work is testament to all who have been involved.

Peter Northover: The author wishes to thank, first of all, Ms Emma Stone upon whose thesis for Part II of her BA Degree in Metallurgy and the Science of Materials Chapter 18 is based; thanks are also very much due to Professor Sir Peter Hirsch and the Department of Metallurgy and the Science of Materials in the University of Oxford for

facilitating the project, and Chris Salter for unstinted assistance with the microprobe analysis. In Norfolk, thanks are due to the late Barbara Green, who instigated the project, and the late Tony Gregory and his amazing knowledge of the Iron Age material of Norfolk. The author would also like to acknowledge the late Jean-Pierre Mohen, then of the Musée des Antiquités Nationals, Saint-Germain-en-Laye, for making available for analysis important comparative material in France.

Fleur Shearman and Marilyn Hockey: Both authors would like to offer their thanks to conservators from the British Museum, notably Simon Dove, Ruth Goldstraw, Pippa Pearce, Penny Hill, Anna Gill, Ruth Scott and Duygu Camurçuoglu. The scientific investigation of the metals was also supported by Lorna Green and David Thickett from the Conservation Research section. Students from conservation internships also made a valuable contribution to the project. These included MSc/MA students from the Institute of Archaeology, University of London (UCL), and particularly He Huang, who carried out both investigation and XRF analyses on the fragmented torcs, under supervision from metals scientist Quanyu Wang. Naomi Hemuki of Westdean College contributed to the cleaning, reconstructing and re-packing of fragmentary torcs. Conservation students from the Sorbonne, Paris, also worked on the reconstruction of fragmentary torcs as part of student internships held at the British Museum over several years.

Figure 1.1 The Snettisham ‘Great Torc’, E.1a

Part I: The Site

Chapter 1
Introduction

Julia Farley and Jody Joy

For over 70 years, spectacular discoveries have been made on a wooded hillside near the village of Snettisham, on the north-west Norfolk coast (**Fig. 1.2**). The unprecedented number of precious metal objects found has led to the location, at Ken Hill (TF 682 349), becoming known as the 'gold field'. The finds, including gold, silver and copper alloy torcs, bracelets, rings and ingots, represent the largest assemblage of prehistoric jewellery from anywhere in Europe, and one of the densest concentrations anywhere of objects decorated with Celtic art. Collectively they have been referred to as the 'Snettisham Treasure', though in fact the deposits consist of at least 14 separate hoards. The objects were buried between around 350 BC and AD 200, spanning the Later Iron Age and Early Roman periods, but with a peak of activity around 60 BC.

The finds were all made in a relatively small area, today contained within part of a single field and an adjoining area of woodland (**Fig. 1.3**). In the Later Iron Age this was most likely an open-air natural site, although there is evidence for a field system which may be associated with the same period as the torc hoards. In the 1st or 2nd century AD, the area containing the hoards was partially enclosed by a large-scale ditch which surrounds an area of around 8 hectares, open on the downward-sloping south-west side. In this volume, 'the site' at Snettisham generally refers to this partially enclosed area.

The objects from Snettisham, particularly the so-called 'Great Torc' (**Fig. 1.1**), have become iconic, featuring in virtually every published discussion of ancient Britain or Celtic art (e.g. Stead 1985a; 1996; Moscati *et al.* 1991; James 1993; Jope 2000; Garrow and Gosden 2012; Farley and Hunter 2015). Yet, despite this renown, the site has never been fully published. This book is the first time that all the finds made between 1948 and 2009 have been brought together in a single volume. This includes early finds from the 1940s–70s, held by Norwich Castle Museum (NCM), the material from the British Museum (BM) excavations in 1990–2 (held by the BM), and finds made as part of metal-detector surveys between 2003 and 2009 (in the collections of NCM). The site has produced an astonishing range and quantity of objects: finds from the 'gold field' at Snettisham comprise over 80% of the corpus of such torcs and bracelets known from Britain.

The Snettisham torcs have been closely studied using cutting-edge scientific techniques, and the results of this extensive programme of investigation are presented here in full for the first time. This work has revealed fascinating new insights into how these objects were constructed and the materials used to create them, including organic components such as wooden cores which helped to maintain the integrity of coiled neck-ring wire 'ropes' during construction. Colour was evidently an important aspect of torc manufacture, and analysis has demonstrated the use of an extensive range of alloys as well as deliberate surface enrichment, and even mercury gilding, one of the earliest recorded instances of such techniques in Europe. Radiocarbon dating of organic components is combined here with new stylistic analyses to suggest that the use of torcs in Norfolk (and perhaps elsewhere in Britain) stretches back at least as far as the 3rd century BC and possibly the

Figure 1.2 Location map showing Snettisham on the north-west Norfolk coast

4th century BC. This supports evidence from other more recent finds (such as the hoard of Middle Iron Age torcs from Leekfrith, Staffordshire, Farley *et al.* 2018) which challenge the previously widely held assumption that the use and manufacture of Iron Age precious metal torcs in Britain was largely restricted to the 1st century BC.

A major reason for the continued importance of Snettisham is that it represents one of the relatively few cases where Iron Age hoards have been recovered under conditions of modern archaeological excavation. In many cases the torcs seem to have been carefully arranged in the ground, being placed either one by one or in small groups to form stacked 'nests'. The meticulous recording carried out on site allows us to reconstruct the sequence of actions which created the hoards, including the order in which individual objects were placed into the pits. This has led to important new insights into hoarding practices, and the social role of the deposits at Snettisham. The 1990s excavations and an associated programme of radiocarbon dating also allow us to appreciate the wider pattern of activities at the site, spanning from the Neolithic to the Late Roman period.

The main period of hoarding, likely culminating around 60 BC, coincides with a major change in the region. From at least the 3rd century BC, precious metals worn in the form of bodily ornament such as torcs had played a central part in the construction and negotiation of identities in north-west Norfolk and beyond. After the mid-1st century BC, much of the significance and power once associated with torcs seems to have waned, most likely connected to the rise of a new form of precious metal object which played a key role in performing social authority: coinage. Following Gosden (2013), we argue here that this shift from a 'world of torcs' to a 'world of coins' is essential to understanding the exceptional finds from Snettisham.

Together, these new insights into the social significance of torcs, their dating and manufacture, as well as the processes which led up to their eventual deposition, allow us to come closer than ever before to understanding who the makers, wearers and depositors of these objects may have been. The results, presented here, have far-reaching implications in many spheres, from the study of Iron Age Britain, to deposition and ritual practices, and our understanding of Celtic art.

The discoveries and their significance

Chapter 4 gives a full chronological account of all known discoveries from the 'gold field' and adjacent woodland. The finds and main features are summarised in **Figure 1.3**. The hoards have traditionally been named alphabetically in order of discovery, and that terminology is kept here. Most of the hoards were discovered during two periods of activity or excavation, in 1948–50 and the early 1990s, but chance discoveries have also been made over the years by farmers and metal-detector users. Two archaeologists, Roy Rainbird Clarke and Ian Stead, both played an important role in investigating Ken Hill and their excavations form the basis for our knowledge of this hugely important site.

Early discoveries made between 1948 and 1950 (Hoards A, B, C, D and E) were reported by Brailsford (1951) and Rainbird Clarke (1950), the latter then Deputy Curator of Norwich Museums. Clarke subsequently oversaw the recovery and retention of the initial discoveries and conducted a small excavation, which was fully published

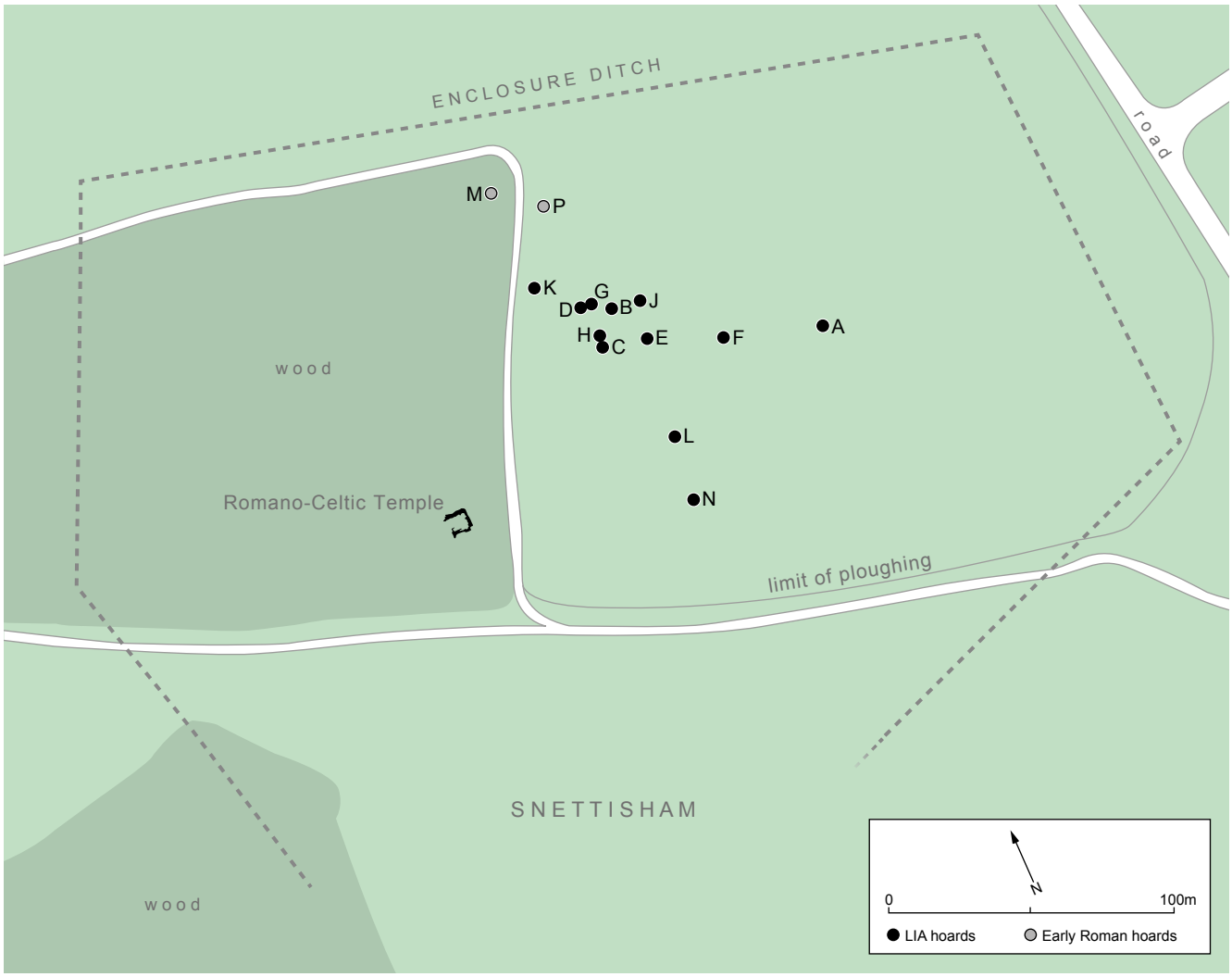


Figure 1.3 Overall map showing the key features and hoard findspots at Snettisham

(Clarke 1954). The legacy of his work is apparent in the displays of torcs and other artefacts at NCM.

A handful of subsequent single finds from the 1960s were reported by Burns (1971), but otherwise the next significant discoveries were made by metal-detecting in 1989–90. In late 1990, local detectorist Cecil 'Charles' Hodder uncovered Hoard F, nearly 600 artefacts contained within a fragmentary copper alloy vessel which was later revealed to be a helmet. Once the find was reported, Ian Stead, then Deputy Keeper of the Department of Prehistoric and Romano-British Antiquities at the British Museum, conducted large-scale investigations of the site during three successive seasons of excavations in 1990, 1991 and 1992. Torc Hoards G, H, J, K, and L and part of scattered coin Hoard N were uncovered during 1990. Between the 1990 and 1991 seasons of archaeological excavation, illicit detectorists raided the site, removing a large hoard of silver Iron Age coins contained within a silver bowl (Hoard P, or the 'Bowl Hoard'), and Hodder also uncovered a group of silver-copper alloy lumps which have become known as Hoard M. The 1991 and 1992 excavation seasons focused on extending the excavation area in the part of the field which had produced the hoards, as well as investigating wider evidence for activity across the site. Most importantly, the large polygonal ditch was revealed, partially enclosing an area of around 8 hectares, with the Iron Age hoards at the centre. Ceramic evidence suggests that this ditch dates to the Early Roman period, at least a century after the main period of deposition for the torc hoards.

After the BM excavations, there was something of a hiatus in discoveries. This changed in 2003, when metal detectorists S. Brown, K. Elfleet and K. Jackson (working with full permission and cooperation from the landowner) undertook a survey of the wooded area immediately adjacent to the hoard. Numerous finds were recovered, and processed as Treasure cases under the new 1996 Treasure Act (previous finds having been covered by the older Treasure Trove legislation). They were subsequently acquired by NCM.

The initial metal-detector survey (subsequent phases of which would continue until 2009) revealed the footings of a stone structure, which was investigated by Natasha Hutcheson in 2004 and revealed to be a rectilinear building, interpreted as a Romano-Celtic temple (Hutcheson 2011).

The scope, structure and arrangement of this book

The aim of this book is to produce the first full account of the discoveries at Snettisham, incorporating scientific analysis and detailed consideration and reinterpretation of the significance of the site.

An interim report on the first season of the BM excavations (which included Hoards F, G, H, J, K, L and N) was quickly published, appearing in *Antiquity* in 1991 (Stead 1991a). Subsequent discoveries elsewhere, in particular at Essendon, and Stead's pre-existing publication commitments (e.g. Stead 2006; Stead *et al.* 2006) delayed his full publication of Snettisham. Stead continued to work on the publication until 2009, and also published an updated interim report which included the 1991 and 1992 seasons (Stead 2014). He has kindly allowed his account of the excavations and discoveries to be reproduced here (Ch. 2), where it is presented largely in its original form. Stead also made his draft manuscript available to the present authors, for which we are grateful. This covered discoveries up to and including the BM excavations, but the scope of this volume has now been extended to include details of the 2003–9 metal-detecting.

The book is divided into three parts, spread across two volumes. Volume 1 contains Parts I and II (Chs 1–15). Part I gives an overview of the site and the excavations, while Part II focuses exclusively on the Later Iron Age and Early Roman hoards, including catalogues of the metalwork and coins and an exploration of their archaeological contexts, where known. Part III, in Volume 2, presents wider interpretation and discussions (Chs 16–24).

Part I begins with Stead's original account of the site and the BM 1990–2 excavations (Ch. 2). This is followed by a detailed analysis of the site location and its context in the wider landscape of north-west Norfolk (Ch. 3). Chapter 4 presents a detailed chronological account of the history of the discoveries from the 1940s to 2009.

The structural report on the excavations forms the second half of Part I. Chapter 5 presents the excavation methodology, geophysical and phosphate surveys, and an account of the areas and features investigated in each season of the 1990s excavations, along with the results of the two programmes of radiocarbon dating carried out on the excavated material. Chapters 6 to 10 present the site evidence in a phase-by-phase discussion, from the Early Neolithic to the post-medieval period. Specialist reports on non-metalwork finds, including lithics, pottery, ironworking debris and animal bone, are included in the relevant phase chapters.

Part II of the volume focuses on the Later Iron Age and Early Roman hoards, beginning with an introduction to the hoard evidence and summary of finds by hoard (Ch. 11). Chapter 12 presents the detailed stratigraphic information derived from the excavation of the hoards recovered by the BM in 1990, including plans and sections of the hoard pits.

The hoard finds are then presented. Chapter 13 gives the typology of torc and other artefact types used in the catalogue which follows (Ch. 14). The typology is an updated and revised version of Stead's (Stead 1991a). This is the first time that all Iron Age and Roman metalwork finds from the site have been treated together in this way, allowing a detailed consideration of the relationship between the collections housed at the BM (Hoards D, E, F, G, H, J, K, L and M, and other finds from the 1990s excavations) and NCM (Hoards A, B, C, stray finds from the 1960s–80s, and finds from the 2003–10 metal-detector surveys). The hoard and stray find Iron Age and Roman coins from both collections are covered in Chapter 15, along with a separate section on the (now lost) 'Bowl Hoard' (Hoard P).

Part III of the book (presented in Volume 2) offers detailed analyses, interpretation and discussion of the metalwork finds which make the site so exceptional. These include the ground-breaking conservation campaign (Ch. 16), which has allowed reconstruction and interpretation of several key objects, such as the helmet which contained Hoard F, and several crushed tubular torcs. Scientific analysis of the materials and techniques used to manufacture the torcs is presented in Chapter 17, accompanied in Chapter 18 by compositional analysis of the bronze objects. Environmental evidence from the objects themselves as well as a survey of the native species currently present in the surrounding area is offered in Chapter 19. Some of the torcs from Snettisham had long lives, with several likely to be more than a century old at the time they were buried, and many showing evidence for repair or deliberate fragmentation and recombination. This has been investigated using a number of techniques, including microscopic examination, and consideration of other signs of wear and repair. The results are presented in Chapter 20, which considers torc biographies and lifecycles.

Discussion chapters 21 to 24 bring together the contextual evidence from the site with the detailed analyses of the hoard objects to assess the significance of Snettisham. We focus on a number of questions including, 'Why Snettisham?' and 'What did the Snettisham hoards do?' The finds from Snettisham represent one of the greatest concentrations of decorated Iron Age metalwork anywhere in Europe, in particular objects decorated with Celtic art. The importance of this decoration is considered in Chapter 21, which presents not just detailed stylistic arguments, but also a consideration of what this art did, and how it transformed both object and wearer. Chapter 22 considers the relationships between people, objects and materials in Iron Age Norfolk. This includes a corpus of other known torcs from Iron Age Britain (an updated and expanded version of a gazetteer originally compiled by Stead).

Chapter 23 and the final conclusion Chapter 24 move beyond material culture to explore the place of Snettisham in its wider social and landscape context. Discussion focuses on the site, its changing significance over time, and the potential importance of its location. A key part of our approach is to ask not just why hoards were buried, but what these assemblages do. Above all, we conclude that, although the deposits are clearly related, it is not productive to view the Snettisham hoards in their entirety as a single 'treasure'. Each hoard is different, with different collection and depositional histories. Individual hoards 'did' something different. Repeatedly depositing artefacts at Snettisham, but with subtle differences in the composition and make-up of the hoards, was part of creating, negotiating and reinforcing social structures, as well as performing and creating social change. Specifically, we argue that hundreds of torcs were deliberately taken out of social circulation around 60 BC as part of a shift from a 'world of torcs' to a 'world of coins' (Gosden 2013).

Appendices provide supporting information. At the end of Part I, Appendix 1 provides a full list of contexts from the

1990–2 excavations and the find types represented, while Appendix 2 presents a report on unstratified flint. The other appendices are found at the end of Part III: Appendix 3 comprises a concordance with previously published finds listings, catalogues and numbering systems; and Appendices 4 and 5 give the results of compositional analyses of Iron Age gold alloy coins and selected gold and silver alloy objects from the NCM collections and comparative material.

Previous publications

The earlier finds from the site (Hoards A–E) were published by Brailsford (1951) and Rainbird Clarke (1950, 1954), with later finds described by Burns (1971), but there has been no previous attempt to bring discussion of these together with later phases of investigation at the site. Similarly, later finds have generally been published in isolation, such as Hutcheson's 2004 excavations (Hutcheson 2011) and the 2003–10 coin finds (Marsden 2011). This book brings these discussions together for the first time.

Stead has published two interim reports on the excavations at Snettisham. One (Stead 1991a) discussed the first season of the British Museum excavations (which included Hoards F, G, H, J, K, L and N). A second updated interim report included the 1991 and 1992 seasons (Stead 2014). In these reports, Stead outlined the events leading up to the 1990 excavation, and the approach taken by the archaeologists on site. He described the large fragmentary Hoard F (which had been lifted by Hodder) and reported key finds from the 'nested' torc deposits recovered by archaeological excavation (Hoards G, H, J, K and L). He had also begun to develop a typology for classifying the wide variety of torcs found at Snettisham (many of which are found nowhere else), including the distinctions between loop, cage, buffer and reel terminals. Much of the paper was taken up with discussion of the motivations for deposition, not least because this impacted on the legal status of the find. In 1990, Treasure Trove law was still in force (later superseded by the 1996 Treasure Act). Under Treasure Trove, a key determining aspect in the disposition and ownership of the find was whether it had been buried with the intention of recovery. Stead, comparing the hoards to known votive assemblages from watery deposits and sanctuary sites, argued that the Snettisham finds were different and represented a 'tribal treasury' which had been buried with the intention of retrieval (1991a, 462–3).

The 'tribal treasury' argument was challenged by Andrew Fitzpatrick (1992a), who suggested that a stronger case could be made for votive deposition, arguing that the modern division between ritual offerings (as gifts to the gods not intended to be disturbed) and savings hoards (destined for recovery and possibly recycling) may not have been relevant in the Iron Age.

Since the early 1990s, there have been major shifts in Iron Age studies. Of particular relevance here are the move towards votive interpretations of hoards and the development of object-focused theoretical perspectives which foreground the active role played by items such as the Snettisham torcs. The lack of a comprehensive publication of the Snettisham finds has impacted on how far this exceptional site has been incorporated into contemporary scholarship, but it has certainly appeared in the literature. In particular, Hutcheson (2003) has revisited the nested hoards of torcs published by Stead (1991a) to argue (like Fitzpatrick) for a votive interpretation. Hutcheson's approach included a consideration of whether colour might have been more important than metal content in determining the order of deposition. The site has of course also featured in innumerable other discussions of Celtic art and wider Iron Age society, and these works are referenced extensively in Part III of this volume.

Archive

Copies of the site archives of Rainbird Clarke's and Stead's excavations are held respectively at NCM and the BM. The objects from Snettisham are distributed between both institutions, with the current location of each object noted in the catalogue.

Note on find numbers, contexts and recording

As with any site which has been explored over many decades, a number of different recording and cataloguing systems have been used in previous publications. The various systems are summarised below.

Object catalogues

The metalwork finds are held by two museums and include discoveries made in a number of different phases of investigation (see Chs 2 and 4). As a result, no previous catalogue system covered all finds, and so in this book metal finds have been given new codes so that they can be unified under a single numbering system, divided by hoard (see Ch. 14). A full concordance with all known previous cataloguing systems is given in Appendix 3. For Hoards A–E, this includes correlation with the previous publication of the finds by Rainbird Clarke (1954), where two separate systems were used simultaneously, one numbering the finds by hoard, and one ordering them by object type. Hoards A–C are in NCM and so have NCM registration numbers. Hoards D and E are in the BM.

NCM registration numbers take the form of the year of acquisition, a stem number for the acquisition group, and then a specific object number, each separated by a full stop, e.g. the Snettisham Hoard A–C material was the 74th group of material acquired in 1949, and so all finds have the stem 1949.74. The first item registered, one of the tubular torcs from Hoard A, was assigned 1949.74.1, the second 1949.74.2, etc. Not all objects were given a specific object number, and so at present these are identified only by their stem. The 2003–9 material has not yet been registered, so does not have registration numbers. For the purposes of recording carried out for this catalogue, each individual object was assigned a raffle ticket with a unique number, and these tickets are, at the time of writing, stored with the objects. The raffle ticket numbers are included in the concordance table in Appendix 3, to assist future researchers wishing to identify specific objects from the catalogue.

BM registration numbers are more complicated, due to the multiple seasons of excavation and the distinction between Treasure Trove and non-Treasure Trove material. The relevant registration stems are listed at the end of

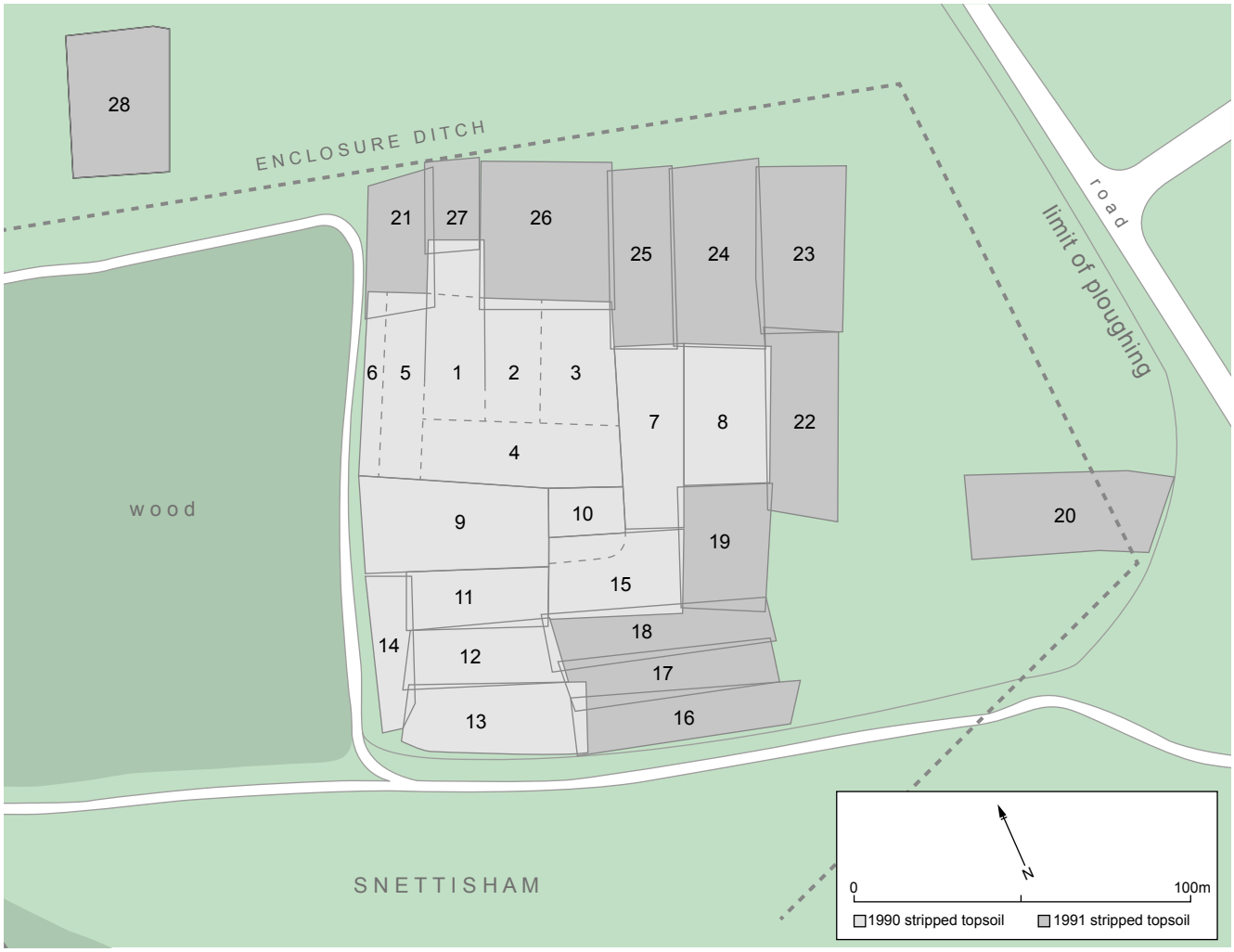


Figure 1.4 Map of the main stripped areas explored in 1990 (light grey) and 1991 (darker grey), numbered 1–28

Chapter 2, after the detailed phases of acquisition of BM material are explained.

The parts of Hoard F (and a small number of other stray finds) recovered by Hodder in 1990 were assigned numbers 1–526 by Ralph Jackson when they were brought into the BM. These numbers have been used in some previous publications (e.g. Cartwright *et al.* 2012; Garrow *et al.* 2009) and so they are included in the concordance as 'Jackson no.'. Objects from Hoard F found during the subsequent BM excavations were given four-letter site codes (see below) and do not have Jackson numbers. All of the Hoard F objects have now been given a single sequence of catalogue numbers, beginning 'F.' They are ordered by object type, beginning with interlinked/composite groups of objects, since it is not possible to determine a sequence of burial or recovery.

The objects in Hoards G, H, J, K and L were also assigned four-letter codes during the BM excavations. Sometimes multiple fragments of a single torc, especially those damaged by ploughing, were lifted separately, and given different codes. Here, each torc is simply given one number, starting with the hoard letter, with numbers assigned in the order in which the torcs were recovered. Hoard M (a group of six large amorphous silver-copper alloy lumps) was recovered during detecting by Hodder, and so was not assigned excavation codes.

Non-hoard finds have been made at the site since the 1960s through to 2009, and have been variously acquired by both the BM and NCM. Most were made during ploughing (1960s–70s: NCM) or metal-detecting (1989: NCM; 1990–2: BM; 2003–10: NCM). A very small number were stratified finds recovered during the BM excavations (1990–2: BM). All of these metal finds are here given a single number sequence, starting with the letter 'S.', though divided into earlier finds (Late Bronze Age to Earlier Iron Age), then torcs, ingots and similar finds which may represent scattered hoard material, and finally other finds less likely to derive from hoards.

Iron Age and Roman coins from the site are similarly unified in a single catalogue here for the first time. In Chapter 15 they are given a single numerical sequence, including the early Hoards (B and C) published by Rainbird Clarke (1954), the coins recovered from Hoards F and N during Hodder's detecting and the BM excavations, and the stray and excavation finds from both the BM excavations and the later detecting at the site. Coin Hoard P is now lost; the coins are discussed, but not given catalogue numbers.

For pottery, bone and lithics, only the finds from the BM excavations are published here. In these cases, the BM site codes (see below) have been used, rather than creating a new catalogue system.

The British Museum excavations

Three seasons of excavation were carried out at Snettisham by the BM in the early 1990s, following Hodder's discovery of Hoard F. These took place in November–December 1990, November 1991 and September–October 1992. In addition, a metal-detector survey was carried out in March 1992. The first season of excavation (1990) focused on the area which had produced the hoards. The second season in 1991 explored further south and east in the hoard field and also opened up slots across features to the north and east discovered by geophysical survey. The latter were revealed to be deep, V-cut linear ditches which formed the large polygonal enclosure partially surrounding the field. The subsequent season in 1992 focused on exploring this enclosure ditch, as well as areas of possible prehistoric activity in the southern part of the hoard field.

Each season of excavation was assigned a different two-letter code, which was used in various aspects of recording, all of which begin with 'S' for Snettisham. These are:

- SN (excavation November–December 1990)
- SE (special code given to finds from pottery-rich pit SN25, excavated in 1990)
- ST (excavation November 1991)
- SM (metal-detector survey March 1992)
- SA (excavation September–October 1992).

Find numbers

Finds from the BM excavations were assigned four-letter codes. The first two letters relate to the excavation season, and the second two letters are assigned in sequence, so the first find from 1990 was SN/AA, then SN/AB, SN/AC etc. SN/AZ is followed by SN/BA, and so on. These codes are equivalent to find numbers, assigned in the order of discovery, and do not necessarily relate to any particular context. Many finds, particularly non-hoard finds from 1990–1, were unstratified, being found in the topsoil or subsoil. Some four-letter codes were assigned to individual objects, while others refer to small groups of material recovered from the same area. For example, ST/EZ refers to a mixed group of material including pottery, bone, flint, charcoal and furnace debris, all recovered from a small area of a particular layer in feature ST35.

Feature and context numbers

In 1990 and 1991, features were given hybrid number and letter codes, using the first two letters for the excavation year and then numbers starting at 1 and assigned in sequence. The number codes have been used in this report where they refer to specific features other than hoard pits; for example SN23 is a Neolithic pit excavated in 1990, and ST35 is a section of the enclosure ditch linear excavated in 1991.

Large areas stripped by box scraper in 1990–1 were also assigned letter codes. For the avoidance of confusion, in this publication each stripped area has been assigned a number in the sequence in which they were opened. **Figure 1.4** shows the location of these areas within the field.

In 1992, hybrid letter–number codes were given to trenches, so Trench 5 in 1992 is given code SA5. Features and contexts within each trench were given numbers, e.g. SA5/1 (the topsoil across Trench 5); SA5/2 (the part of the enclosure ditch which runs across Trench 5). Sections of the ditches were given letters, and the layers/contexts within these sections were given numbers. So, for example, SA5/2, Section D, Layer 3 refers to the third layer down within Section D of the enclosure ditch in Trench 5 (Feature SA5/2). **Figure 4.1** summarises the areas investigated in 1991–2.

Note on spelling

In this book we use the spelling 'torc' rather than 'torque' following Clarke (1954) in the first report on the discoveries from Snettisham.

Abbreviations used

- ACBMG = Archaeological Ceramic Building Materials Group
- BM = British Museum
- CADB = Celtic Art Database
- CBM = Roman ceramic building material
- HER = Historic Environment Record
- HNER = Norfolk Historic Environment Record
- IARCH = Iron age and Roman Coin hoarding research project
- NCM = Norwich Castle Museum
- NMP = Norfolk National Mapping Programme
- PAS = Portable Antiquities Scheme
- PCRG = Prehistoric Ceramic Research Group
- PDR = Post Deverel-Rimbury
- SHARP = Sedgeford Historical and Archaeological Research Project
- TT = Treasure Trove

Chapter 2
Excavating at Snettisham

Ian Stead

Introduction

Snettisham, between King's Lynn and Hunstanton in Norfolk, has long been famous for its Iron Age gold torcs. The first discoveries were made when the field now known as the 'gold field' (TF 68153490), on the Ken Hill Estate, was ploughed rather deeper than usual for a cereal crop. Previously it had been used for the cultivation of lavender. On 12 November 1948 the ploughman unearthed three gold tubular torcs and part of another. He showed them to his foreman who identified them as bits of an old brass bedstead, so they were left out in the field. On the following day the ploughman found a second deposit, and the day after that he found a third. All the artefacts stayed in the field for about a week, until they attracted the attention of a director of the Norfolk Lavender Company, who called in the Norwich Castle Museum. The Keeper of Archaeology, Rainbird Clarke, immediately organised an archaeological excavation and soon located the sites of the three hoards, which he labelled in order of discovery, A, B and C. A series of trenches in the surrounding area revealed no more hoards, and no other remains contemporary with the hoards (Clarke 1954).

Two years later, in November 1950, the ploughman unearthed two more lots of gold artefacts, subsequently labelled Hoards D and E. In Hoard E was the magnificent Great Torc, a small British coin within it (see Ch. 15, Cat. no. 169), together with the terminal of another torc and a decorated bracelet; 'Hoard D' was a single torc, with a ring through one terminal (Clarke 1954). D and E may have been deposited with other artefacts but there was no excavation to investigate their sites. Subsequently, isolated torcs were found in 1964 (S.17 and S.31 in the vicinity of B–E; Burns 1971), in 1968 (S.16 deposited by a harrow on the track southwest of the hoards; Burns 1971) and in 1973 (S.18 about 130m north-west of Hoards B–E; unpublished). In the 1970s, Barbara Green from Norwich Castle Museum carried out a survey at the site with the involvement of the BBC. A detailed fieldwalking exercise by the Norfolk Archaeological Unit over the winter of 1983–4 produced no Late Iron Age artefacts in the area and it was generally assumed that the site had been thoroughly wrecked by ploughing.

Then, in 1989 local detectorist Cecil Hodder (known to his friends as Charles) was given permission to use his metal detector on the site and in the month after harvest he recovered some fragments of torcs (S.25, S.27 and S.28) and three British coins (Cat. nos 219, 234 and 259). Encouraged by these finds, he returned the following year to carry out a more thorough survey. On 25 August 1990 Hodder located Hoard F, a mass of fragmentary artefacts in gold, silver and copper alloy. He fully appreciated the significance of his find and tried to contact the Norfolk archaeologists, but it was the Bank Holiday weekend and nobody was available. Hodder decided to carry out the excavation himself. Hoard F weighed 9.2kg and had been deposited in a shallow pit, possibly within a copper-alloy helmet whose remains were in very poor condition.

The discovery of Hoard F showed that the site had not been completely destroyed and proved the need for an immediate archaeological investigation before treasure hunters were alerted. The location of the 1948/50 hoards

had been plotted on Ordnance Survey maps, in a large open field adjoining a major road, making it an easy target for clandestine metal detectorists. Statutory protection, scheduling the site as an Ancient Monument, would not deter the more unscrupulous operators. The Trustees of the British Museum decided to launch their own investigation before the new discovery received publicity. The immediate aim was to attempt to recover any hoards still in the ground and the long-term goal was to investigate the archaeological context thoroughly.

The decision to search for hoards faced archaeologists with an unusual challenge which had to be met within a tight time schedule and accompanied by a high level of security. The obvious solution was to use metal detectors, but archaeological organisations have little experience in this field. Fortunately, my colleague Tony Pacitto was available to advise and participate and Charles Hodder was also keen to help. Several metal detectors, and a gradiometer for geophysical survey, were assembled and employed in experiments at Snettisham at the end of October 1990. A collection of copper alloy artefacts weighing about 1kg was buried as a 'hoard' and surface metal was scattered to test the reactions of various machines. Hodder's Tesoro metal detector and a borrowed Garrett machine met with the most success, but they seemed unable to distinguish between small shallow finds and the large deep 'hoard'. Gridded squares in the vicinity of the hoards were surveyed with a gradiometer but no pattern emerged, and when the same squares were surveyed with the metal detectors a considerable amount of superficial and recent metal was collected. Hoard F had been found after Hodder had dug a hole to check a fairly weak signal and then got a much louder response at the bottom of his excavation. So no signal from the metal detector could be dismissed lightly and a vast area had to be explored in a fairly short time. It was decided that the most effective way to distinguish between superficial metal and substantial hoards was to remove the plough soil and thus get nearer to the hoards.

A full-scale excavation started two weeks later, on 12 November 1990, and lasted for five weeks. Its resumption was delayed until November of the next year because of a crop of sugar beet, and then followed by a metal-detecting survey in the adjoining wood in March 1992. Subsequent excavations in September and October 1992 concentrated on the surrounding area in an attempt to find a context for the hoards. The various seasons of excavation are summarised in **Figure 4.1**.

The key members of the 1990–1 team (some of whom are shown in **Figure 2.1**) included three of the British Museum staff: the writer, Tony Spence from the Department of Prehistoric and Romano-British Antiquities, and Dave Webb, seconded from the Department of Photography. Simon Dove, Department of Conservation, made frequent visits and provided invaluable help. Tony Pacitto, adept at solving problems and skilled in electronics, operated a metal detector and gradiometer as well as assisting in the direction of the excavations. Charles Hodder made a vital contribution with his metal detector and worked throughout the excavations as a full member of the team but refusing to accept payment. The core team was completed by Peter Makey, Ian Blomeley, Tim Compton and other volunteers, some provided by the Norfolk Archaeological Unit. In Dave Miller we were fortunate to have an extremely skilful driver for the bulldozer that towed the box scraper. So good was he that later we persuaded him to participate in a similar excavation at Essendon in Hertfordshire, a long way from his base. In the 1992 season Neil O'Loughlin and Dave Webb supervised the sites and Sheelagh Stead ran the finds shed. The security problem was eased by a rota of British Museum warders who guarded the site round the clock for the entire length of the excavations. Everyone who worked on the site signed a paper disclaiming any reward under Treasure Trove regulations.

The project met with the full support of the Norfolk Archaeological Unit (subsequently Norfolk Landscape Archaeology) where our main contacts were Andrew Rogerson and David Gurney. Derek Edwards showed us the air photography cover and photographed the excavations from the air. Norwich Castle Museum gave access to detailed records plotting the previous discoveries of hoards and isolated torcs and facilitated subsequent research by lending artefacts to the British Museum. The operations would have been impossible without the support of Sir Stephen and Lady Lycett Green, the Trustees of the Ken Hill Estate, and the farm manager, John Austen.

Excavations 1990–1991

In an attempt to define targets at the start of the excavation Mike Cowell (British Museum Research Laboratory) organised an extensive phosphate survey that revealed an increase in phosphate levels in the wood to the west (where Romano-British pottery was found in animal burrows) but nothing significant in the immediate vicinity of the hoards (see Ch. 5). Meanwhile, the first aim of the excavators was to locate the pit for Hoard F, easily found because it had been accurately plotted by Hodder. Its re-excavation provided the opportunity to examine the carrstone rock and the depth of plough soil – an essential preliminary to the use of heavy machinery. In the second week of the excavation a large box scraper was used to strip the soil in shallow spits whilst a team of archaeologists watched as the soil entered the box, observed the scraped surface and examined the soil deposited on the spoil heap north-west of the stripped area. Metal detectors were used by Charles Hodder and Tony Pacitto to scan the stripped surface and anomalies were flagged and immediately investigated by other members of the team. Archaeological finds were plotted using an electronic distance meter operated by Tony Spence. The first area to be stripped (Area 1; see **Fig. 1.4** for locations of numbered stripped areas), about 60 by 20m, was in the vicinity of Hoards B and D and on the first day Hoard G was located. Three days later, and 11m away, Hoard H was found. The hoards were excavated successively and a routine was established: after the artefacts had been plotted, they were photographed by Dave Webb and lifted, taken to Ken Hill House to be shown to Sir Stephen and transported to Norwich to be secured in a safe at the Castle Museum. The days were short and very cold.

The box scraper was then used to extend the excavated area to the east (Areas 2–3), where Hoard J was discovered at

Figure 2.1 The 1990 excavation team on site. From left to right: Tim Compton, Ian Stead, Peter Makey, Tony Pacitto (back), Alice Lyons, Mike Hurn, Tony Spence, Pippa Smith, Dave Webb (front), Charles Hodder, Dave Miller

the beginning of the third week. Torcs from its upper layers had been damaged and scattered, with fragments being found to the north and south of undisturbed torcs in a shallow pit. The box scraper then removed plough soil to the south (Area 4), over the site of Hoard F and the presumed sites of Hoards C and E, and to the west as far as the track adjoining the wood (Area 5). There, only 7m from the track, Hoard K was found. Like Hoard J its upper torcs had been scattered by agricultural machinery in an even longer north to south line but the nucleus remained in a similar shallow pit.

Meanwhile the central part of the stripped area, amounting to just under 1,000 sq.m and including the sites of Hoards G, H and J and the assumed sites of Hoards B to E, was thoroughly excavated by hand in search of other archaeological features. Five small shallow pits were discovered and all had Neolithic finds (SN21, 23, 24, 28 and 29; see **Fig. 6.2**). This area was trowelled down to the natural rock but the only other finds were occasional prehistoric sherds in shallow sandy depressions (some undoubtedly animal burrows) and a few scattered Iron Age and Roman coins. The edge of one of Rainbird Clarke's trenches was almost certainly identified, cutting pit SN21. Another Neolithic pit was found when shovel-scraping in the stripped area to the east (SN27), as well as a pit containing a large quantity of Earlier Iron Age pottery (SN25).

At this stage, the start of the fourth week and the beginning of December, the area stripped by machine and scanned by metal detectors included the sites of most known hoards, but its boundary was only 4m beyond Hoard F and Hoard A was well outside it, some 30m further to the east. It seemed reasonable to expect other hoards to the east and perhaps to the south and north. The central area subjected to excavation with trowels (see Ch. 5, **Fig. 5.5**) had produced no Iron Age features and if it were to be extended in similar detail there was every chance that more Neolithic pits would be uncovered and the team would be diverted from its main objective. So it was decided to change tactics. The box scraper would continue to strip the upper part of the topsoil but there would be no intention of following this with shovel-scraping or trowelling. That way hoards could be located by the metal detectors leaving other archaeological features undisturbed.

Accordingly, more than 2,000 sq.m were stripped to the east of Hoard F but the area was devoid of coins and torc fragments. Two more Neolithic pits (SN26 and 30) were discovered when the box scraper went deeper than intended and the 1948 excavation for Hoard A was recognised and

re-excavated but without further finds. Attention then turned to the area south of Hoards C and H (Area 9), where Iron Age coins had been found previously. Scattered Iron Age metalwork and some coins were discovered as well as worked flints, more here than elsewhere on the site: throughout these excavations Peter Makey ensured the recovery of flint from across the stripped areas of the site.

Towards the end of the fourth week it was decided that the area had been thoroughly checked for hoards and the excavation started to close down. But Pacitto was not entirely satisfied with the survey at the southern margin of the site. He took the metal detector out again and discovered Hoard L, the most impressive collection found on these excavations and 40m away from the nearest other hoard. The security warders returned, the huts were re-hired and the excavation was extended for a further week. The box scraper was then used to strip topsoil to the south and east of Hoard L (Areas 10–15), and though other coins and torc fragments were found there was no other hoard. Towards the end of the fifth week the site was backfilled under archaeological supervision and the area was again scanned with metal detectors. In all 1.2 hectares had been investigated. The excavation ended on 14 December.

Over the winter of 1990–1 Charles Hodder continued to work with his metal detector until the field was sown with sugar beet. Then he turned his attention to the adjoining wood. Even in winter the vegetation rendered most of the wood impenetrable as far as metal detectors were concerned but on an earlier occasion Hodder had managed to find an Iron Age coin (Icenian 'Bury', Cat. no. 275). In the north-east corner of the wood, in March 1991, he found Hoard M. Quite different from the others, it was a collection of six rough lumps of silver-copper alloy with a total weight of 6.6kg.

The British Museum project was resumed in November 1991, late in the year because it had to follow the sugar beet harvest. Again the box scraper was employed to strip the upper levels of topsoil, each spit was surveyed by the two metal detectorists and there was no intention of excavating areas by hand. To the south of the area cleared in 1990 (in Area 18) several Iron Age coins and fragments of a torc (S.24) were found, including a concentration of coins that was almost certainly a scattered hoard (Hoard N). To the east an outlying area (Area 20) (see **Figs 1.4, 4.1**) was stripped because torc fragments (S.25, S.27, S.28) and lumps of silver had been detected there by Hodder, but only a single torc fragment (S.52) was found. The main area was then extended to the north and then to the east and north-east.

In the north-west corner, to the east of Hoard M, in Area 21, an area of about 2,000m^2 had been 'salted' by clandestine metal detectorists: hundreds of small fragments of metal had been distributed in an attempt to deter other detectorists. The farm manager, John Austen, reported that he had disturbed metal detectorists working there earlier in the year and that they had marked out the area with flagged posts. There were very few archaeological finds when this area was stripped, the most interesting being fragments from a silver vessel (P.1–7). At the time the full significance of the vessel fragments was not appreciated but later it became apparent that the clandestine metal detectorists had made off with a hoard said to have been buried in a silver vessel (Hoard P, Ch. 15). In 1990 its site, 40m away from the nearest other hoard, had been covered by our main spoil heap. The final area excavated in 1991, Area 28, to the north of the wood where a torc had been discovered in 1973 (S.18), produced no other antiquities and brought the total area stripped in 1990 and 1991 to 2.5 hectares.

In March 1992 further work with our metal detectors in the north-east corner of the wood located a Roman coin (Cat. no. 479) and a fragment of a torc (S.78). The wood was the obvious place to look for more hoards but until the trees were felled there was no hope of carrying out a thorough excavation. The owners had no intention of felling trees in the foreseeable future.

Excavations in 1992

To the north of the Area 21, stripped in 1991, iron slag was scattered over part of the field. It had been noted in 1990, and indeed had been plotted in 1953 on maps in Norwich Castle Museum. But in 1991 it was obvious that the clandestine metal detectorists had dug into it. Their backfilled hole was investigated and a mass of iron slag located, the occasional sugar beet indicating that the disturbance was very recent. A trench excavated in 1991 (ST35) showed that the slag was in the filling of a Roman ditch (see Ch. 9), a discovery that prompted a re-examination of air photographs where its line was now quite obvious. Previously it had been confused with a relatively modern field boundary. The air photographs showed a sharp corner to the east, beyond which it continued to the south, parallel to the modern road. The filling of the ditch responded well to the gradiometer, so after tracking it with traverses an area survey was started in 1991, resumed in March and concluded in October 1992. A polygonal enclosure of about 8 hectares was defined (see **Fig. 9.1**).

Trench ST35 excavated in 1991 revealed a ditch with a steep-sided V-shaped profile and a narrow flat channel at the bottom. It was 1.8m deep below the present ground level and 2.8m wide at the base of the plough soil (see **Fig. 9.6**). The upper part was filled with a compact mass of slag and furnace debris that seemed to have been dumped from the south side. The gradiometer showed that the slag filling extended for about 20m: it was a deliberate filling, presumably to form a causeway. In the excavated section it extended to the plough soil and any original surface would have been destroyed. The deposition of the slag was dated by Roman pottery including a sherd of Oxford ware no earlier than AD 350 (ST/DN, also ST/DM; the coin Cat. no. 506 – was found towards the top of the slag). In the lower filling of the ditch, 0.4m from the bottom, were two joining sherds of 1st-century AD wheel-thrown coarse ware (ST/GE).

The initial section cut through the slag in the ditch filling (ST35) was towards the middle of a 320m length of ditch that formed the north side of the enclosure. At the west end the ditch turned to the south-west at an angle of 100° and at the east end it turned to the south at an angle of 107°. The east ditch, in the open field, was surveyed by gradiometer with little difficulty and a south-east corner was located, again with an angle of 107°. The south-east ditch then crossed the

drive leading to Ken Hill House, and was actually detected under the surface of the drive. As it headed to the south it became less clear and eventually disappeared from the geophysical survey. The sharp north-west corner took the ditch into the wood where it was tracked by a series of traverses in relatively open areas. South of the wood, and south of the drive, it was re-located in grassland on a very different alignment having turned at an angle of 140° in the south-west corner of the wood. Only a short length of the west ditch, about 40m, could be surveyed before it passed into another wood where traverses eventually failed to locate it. But in that 40m length a very clear entrance was located, the only entrance discovered in the entire circuit. The area was subsequently stripped and excavated as Trench 5.

The gradiometer met with problems south of the drive, in an area of parkland, ploughed field, mixed wood and a poplar plantation. Here the plateau of the main site ended and the land sloped down as the carrstone gave way to clay. Complications were caused by other buried linear features, some of which were recent attempts at drainage and others perhaps periglacial; there were difficulties with undergrowth and close-set trees in the wood; and widespread remains of the wire netting originally erected to protect the poplars from rabbits. But there was no doubt that the south-east ditch went down the hill beyond the plateau, contrary to expectations that it would turn to follow the contours.

The gradiometer's attempts to locate a south ditch were unsuccessful though it did show a short length of apparent ditch aligned with the last point at which the south-east ditch had been identified. On excavation (Trench 3, feature SA3/2) it was found to contain a recent land-drain 1.3m below the present surface: the possibility that the land-drain had been inserted into the ancient ditch was considered but excavation to the east and west failed to locate it. An attempt was then made to clear remnants of the wire netting in order to track the south-east ditch but the second survey produced similar negative results. Trenching eventually narrowed its terminus down to within 5m (between Trenches 11 and 19): inevitably it was covered by a poplar tree. A trench in the wood (Trench 14) located the west ditch south-east of the entrance but there was no possibility of defining its southern terminal.

It seems that the polygonal enclosure was not ditched on the south side. The south-east ditch, and perhaps the south-west ditch too had not extended much beyond the edge of the carrstone, ending at a still active springline. The south side of the enclosure was open to what in antiquity would have been marshes bordering an inlet from the Wash.

The south-west entrance, the only entrance identified by the gradiometer survey was an obvious target for excavation (see **Figs 9.3–4**). An area 24 by 14m (Trench 5) was excavated to expose the entrance and areas on both sides of the ditch in the hope of locating a gateway and bank, perhaps in the form of post holes or a palisade trench. But the only archaeological features apart from the enclosure ditch were a recent ditch that crossed its line (SA5/4) and two shallow hollows (SA5/3 and SA5/5) no more than 0.1 to 0.15m deep, one with a couple of flint flakes and some Earlier Iron Age pottery (SA/BJ). There was a causeway 6m wide between the terminals of the ditch but no hint of metalling, hollow-way or wheel ruts. In the 5.5 to 6m excavated on either side of the ditch there was no trace of the structure of a bank. A 15m length of ditch north of the entrance was completely excavated to find dating evidence. Here the ditch was about 2.5m wide and 1.2m deep where it cut the carrstone, 1.5 to 1.6m deep below the present ground surface. In the middle filling (Layer 3), some 0.5 to 0.6m above the floor of the ditch, were large sherds from 1st to 2nd-century AD pots (SA/AL – projected on the section, see **Fig. 9.5a**; SA/AQ, SA/AU, SA/AV, and SA/BB; see Ch. 9, **Fig. 9.7** nos 3–8) and four 4th-century Roman coins (Cat. nos 473 and 478 – projected on the section, see **Fig. 9.5a**; and Cat. nos 471–2). In the primary silting, within 0.1m of the bottom, were many sherds from a Neronian/Flavian jar (SA/BQ; see **Fig. 9.7** no. 2) and one large sherd from a 2nd-century pot (SA/BM; see **Fig. 9.7** no. 1). The ditch had been allowed to silt from *c.* AD 100, and there was no evidence to suggest that its original excavation was any earlier: none of the other sections through the enclosure ditch produced anything to vary these conclusions (see Ch. 9).

The south-east ditch (explored in Trenches 1, 2, 6, 11 and 17) was similar to the others in depth and profile and again no evidence for a bank was located. Lengths of ditch amounting to 11m were cleared, producing less pottery but confirming the dating from the other side of the site, and including a greyware sherd in the primary filling (SA/BC). The most significant find was a brooch about 0.8m from the bottom of the ditch (S.244).

Two areas inside the enclosure were excavated in 1992 in an attempt to locate remains contemporary with the filling of the enclosure ditch, but none were found. The first, in grassland south of the modern drive (Trench 7), was selected because the gradiometer survey had suggested several ditches on two orientations. The excavation uncovered two ditches parallel with the drive (SA7/4 and SA7/5) and re-cut ditches on north–south orientations (SA7/3, SA7/6 and SA7/8). All were disturbed by animal burrows but they included prehistoric and a very few Romano-British sherds. The gradiometer showed that the parallel ditches continued alongside the drive to the eastern limits of the enclosure where a trench (Trench 17) proved that one of them (SA17/3) cut across the line of the filled enclosure ditch. This stratification and their alignment with the drive suggests that the parallel ditches were relatively modern field boundaries and drainage ditches and that the prehistoric and Roman sherds were residual in them. There were only three minor features undisturbed by modern ditches and animal burrows, two small pits 0.5m diameter cut 0.2m into the carrstone (one, SA7/10 with Earlier Iron Age sherds, SA/DM in the pit and SA/DL above; the other, SA7/12, without finds) and SA7/2, the base of an Earlier Iron Age pot with burnt stones in and around it (SA/CD).

The second excavation, Trench 12, an area of just over 300 sq.m in the field north of the drive, was sited towards the centre of the polygonal enclosure, in an area where 'Norfolk Wolf' staters had been found and where two apparent ditches had been located on the geophysical survey. The 'ditches' (SA12/2 and SA12/3) were not archaeological, perhaps they were periglacial, but several small, shallow pits (SA12/4–28) were also discovered. Some were certainly the

remains of animal burrows but others seemed to be the result of human intervention: the bottoms of pits or perhaps post holes, nine of which produced prehistoric pottery. Shallow pits like these would be the sole surviving remains of hoard pits if the hoards had been completely removed but there were no fragments of metal so perhaps they relate to the possible settlement or midden activity attested by the sherds (see Ch. 7).

The occasional piece of *tegula* from the south-west part of the site and a fragment of flue tile from the wood to the west of the hoards suggested that there had been a Roman building somewhere in the vicinity (see Ch. 9).

One other trench (Trench 15) was excavated in 1992, in a field known as Bunting's Pasture, to the east of the 'gold field', on the east side of the road from King's Lynn to Hunstanton. In 1989 Charles Hodder had surveyed the field with his metal detector and discovered a pair of bronze artefacts ('drinking horn terminals', S.253–4). He identified the approximate site, near a spring, the area was again surveyed with metal detectors and a single trench was excavated. Nothing of any antiquity was found.

Treasure Trove

The Snettisham Treasure was discovered at a time when Treasure Trove regulations were still in force, regulations that were eventually superseded by the 1996 Treasure Act. Treasure Trove was a royal prerogative that gave the Crown the right to any gold or silver that had been hidden, provided that the owner was unknown and that he or she had hidden it with a view to recovering it (*animus revertendi).* In certain parts of the country the franchise for Treasure Trove had been assigned to other bodies. Where a find was suspected of being Treasure Trove the local coroner determined its fate, usually at an inquest and often with a jury: if the find was declared Treasure Trove the coroner seized it for the Crown or a franchisee, if not it was returned to the landowner. In recent times it became the practice for the Crown to offer Treasure Trove to a museum and for the museum to give the finder a reward amounting to the full market value of the artefacts in order to encourage the reporting of discoveries.

Treasure Trove was devised as a source of income for early medieval monarchs and was a very unsatisfactory way of protecting antiquities in the 20th century. It was part of common law, not statutory law, and there were problems with definition. Gold and silver usually occur as alloys and some artefacts, such as plated coins, have only a little precious metal. Many hoards had both a Treasure Trove and non-Treasure Trove component, so were split between two owners. To qualify as Treasure Trove artefacts had to have been deliberately hidden, so many single pieces (e.g. a ring or a coin) that could have been lost were not usually regarded as Treasure Trove. And the artefacts had to have been hidden with the intention of recovery, which was not always easy for an inquest to decide. The concept of *animus revertendi* was a potential problem with many Treasure Trove cases. Some hoards were undoubtedly buried for safety and intended to be recovered. But grave goods, for instance, were deliberately buried but would be expected to stay in the earth forever (though even grave goods in barrows were once regarded as the king's property, Bruce-Mitford 1950). Far more complex, because it depends on archaeological theory and fashion, is the argument that items of precious metal could have been buried as gifts for the gods. A famous case that used this argument, the Broighter Hoard (found in 1896, County Londonderry, Northern Ireland), was eventually brought to trial in the High Court of Justice in 1903 and declared Treasure Trove (Armstrong 1920). Acknowledging the difficulty in addressing the original intention behind deposition, the 1996 Treasure Act removed the *animus revertendi* requirement for most potential Treasure finds.

The first inquest on the Snettisham Treasure, held on 18 December 1948 at Hunstanton, decided that Hoard A was Treasure Trove, but not Hoards B and C which were held to include too little precious metal. The Treasure Trove items were the property of the Duchy of Lancaster, the franchisee, and were passed to Norwich Castle Museum; non-Treasure Trove items were donated to the same museum by the landowner. The gold objects from Hoards A and B found during Rainbird Clarke's excavation were seized by the coroner without an inquest. Hoard D was declared Treasure Trove at an inquest at Hunstanton on 23 November 1950. The following day Hoard E was discovered and seized by the coroner without an inquest. Hoards D and E were acquired by the British Museum who paid a reward of £1,850 to the finder, Tom Rout. Sir Stephen Lycett Green recalled that when the Great Torc (Hoard E) was found he took it across to Sandringham, where King George VI was in residence. The king asked to whom this magnificent object belonged, and Sir Stephen replied, 'To you, sire'. The king, of course, was also Duke of Lancaster. A version of this story, later denied by Sir Stephen, related that the king not only held the torc but also wore it on his neck.

Single Snettisham torcs declared Treasure Trove at inquests on 17 August 1964 (Dersingham), 18 September 1968 (Snettisham) and 20 August 1973 (Hunstanton) were passed to Norwich Castle Museum and the finders rewarded. An inquest on Charles Hodder's 1989 finds was held at King's Lynn on 14 December 1989 and both Treasure Trove and non-Treasure Trove items were acquired by Norwich Castle Museum. Hoard F and fragments found about that time were the subject of an inquest on 7 March 1991: the gold and silver items were declared Treasure Trove and the British Museum paid Hodder a reward; the non-Treasure Trove items were purchased from the Trustees of the Ken Hill Estate. The gold and silver items from the 1990 and 1991 excavations and Hodder's finds from those two years were declared Treasure Trove at inquests held at King's Lynn on 26 March 1991 and 20 February 1992. The Duchy of Lancaster gave these pieces to the British Museum but no reward was paid because all members of the excavation team, including Charles Hodder who refused to be treated differently, had signed papers disclaiming any right to a reward. The non-Treasure Trove items from 1990 and 1991 were purchased by the British Museum from the Trustees of the Ken Hill Estate.

Treasure Trove has a bearing on another aspect of this project. In 1993 it was decided to follow the Snettisham excavation by investigating the nearby site at Sedgeford,

where part of a torc had been found in 1965 (BM 1968,1004.1; Brailsford 1971). The excavation was about to start when the landowner withdrew his consent on legal advice. He asked for half the value of any gold or silver found on his land. But if such gold or silver was declared Treasure Trove then it would belong to the Duchy of Lancaster and it was not the landowner's to sell. The British Museum could not accept this condition so the excavation was aborted. But a decade later, in 2004, when the 1996 Treasure Act gave the landowner a legitimate right to half the value of the Treasure, the Sedgeford site was surveyed by metal detectorists working for another organisation and the rest of the torc was found (BM 2005,1103.1; TAR 2004, 48–9, no. 35).

British Museum registration numbers

Treasure Trove complicated the way in which artefacts have been registered in the British Museum because registration numbers are assigned to a batch of artefacts acquired from a single source and recorded according to the month and year in which they are acquired. Thus 1991,0501.6 is the sixth item of the first batch of artefacts acquired in May 1991 by the then Department of Prehistoric and Romano-British Antiquities (sometimes given the prefix 'P' within museum documentation e.g. P. 1991,0501.6). As each batch is acquired from a single owner Treasure Trove (TT) and non-Treasure Trove (non-TT) items are recorded separately which results in 10 different registration batch numbers for Snettisham items in the Department of Britain, Europe and Prehistory (the successor of the Department of Prehistoric and Romano-British Antiquities) and a further eight numbers for items in the Department of Money and Medals (formerly Department of Coins and Medals):

- *Hoards D and E:*
  Objects: 1951,0402.1–4
  Coin: 1951,0507.1
- *Hoard F and other Hodder finds:*
  Objects: TT, 1991,0501.1–233; non-TT, 1991,0702.1–277
  Coins: TT, 1991,0904.1–15; non-TT, 1991,1016.1
- *1990 excavations:*
  Objects: TT, 1991,0407.1–66; non-TT, P1991,1101.1–5
  Coins: TT, 1991,1017.1–15; non-TT, 1991,1018.1–22
- *1990–1, Hodder's metal-detecting:*
  Objects: TT, 1992,1203.1–12; (see below for non-TT)
  Coins, TT, 1992,0803.1–4
- *1991 excavations:*
  Objects: TT, 1992,1202.1–9; non-TT, 1991,0409.1–30 (includes Hodder 1990–1)
  Coins: 2009,4213.1–105 (also used for 1992), 2018,4117.1–2
- *1992 excavations:*
  Objects: 1992,0210.1–6
- *Hodder's drinking horn terminals:*
  1993,0201.1–2

This helps to explain why the catalogue for Hoards G–L is not organised in order of registration but by a simple numerical sequence relating to the order in which artefacts in each hoard were removed from the ground.

Chapter 3
The Site and its Local Context

Julia Farley and Jody Joy, with a contribution by Tony Spence

Snettisham village is located between King's Lynn and Hunstanton, in north-west Norfolk. The 'gold field' is on a promontory known as Ken Hill, just to the north-west of the modern village (**Figs 3.1–2**). The form of the hill is rather like a curled finger pointing down from north to south, with its highest point at the southern 'fingertip' and the hoard field nestled on the sheltered lower slope towards the base of the 'finger'. Although very close to the coast, the site itself is on the inland side of the hill, overlooking the Ingol valley and the contemporary village of Snettisham.

Ken Hill is an outcrop of ferruginous sandstone, known locally as 'carrstone', a material which is widely used in north-west Norfolk as a building material. In its degraded state it forms a coarse ginger to dark-brown sand, which is very free draining, and of limited agricultural use. Ken Hill is an unusual feature in the region, where most of the coastal plain consists of flat, low-lying marshy ground: the Norfolk Fens. Today, it forms a promontory overlooking the Wash (the rectangular estuary and bay formed at the border between north-west Norfolk and Lincolnshire, running out into the North Sea, see **Fig. 1.2**).

Much of Norfolk is low-lying and is less than 60m (200ft) above current sea levels (**Fig. 3.8b**). The Snettisham promontory is a conspicuous feature in the surrounding landscape, visible from some way along the coast in either direction. It is part of the so-called 'western escarpment', which runs north–south at the fen edge. The highest point of the escarpment is just over 100m above present-day sea levels. The site at Snettisham sits towards the north-western edge of this ridge. The highest parts of the hoard field are around 35m above sea level, with the southern end of the hill rising to up to 42m. These characteristics have led researchers such as John Davies to speculate that Ken Hill was '…a special place with a unique strategic importance' (Davies 2008, 101).

The environment of Iron Age Norfolk was very different from today (Davies 2008, 87) and water tables were higher and river channels deeper (Wiltshire and Murphy 1999, 156). The coastline, rivers and estuaries of Norfolk offered natural routeways which facilitated contact with neighbouring regions, as well as further afield across the Wash to central and northern England, and across the North Sea to the continent (Davies 2008, 87). As such, the Snettisham promontory would have been a well-connected area in the Late Iron Age, at the northern end of navigable waterways running from inland Norfolk down to the Wash and ultimately out into the North Sea, and lying close to the path of the Icknield Way (a routeway with likely prehistoric origins linking north-west Norfolk to Suffolk and beyond). The Snettisham site is currently located slightly inland, but it was far closer to the sea during the Late Iron Age. From around 250 BC, continuing into the Roman period, sea levels rose to 1.5m above present-day levels with the Fenland coastline running as far south as a line roughly extending from Wisbech to Downham Market (Waller 1994, 75–9, fig. 5.22; Davies 2008, 87) (**Fig. 3.3**). Considering this marine transgression and factoring in the effects of modern-day drainage, during the Late Iron Age Ken Hill would have stood as a headland reaching out into the Wash, surrounded by water on three sides and probably accessible by boat at high tide. The southern, unenclosed, side of the hoard field

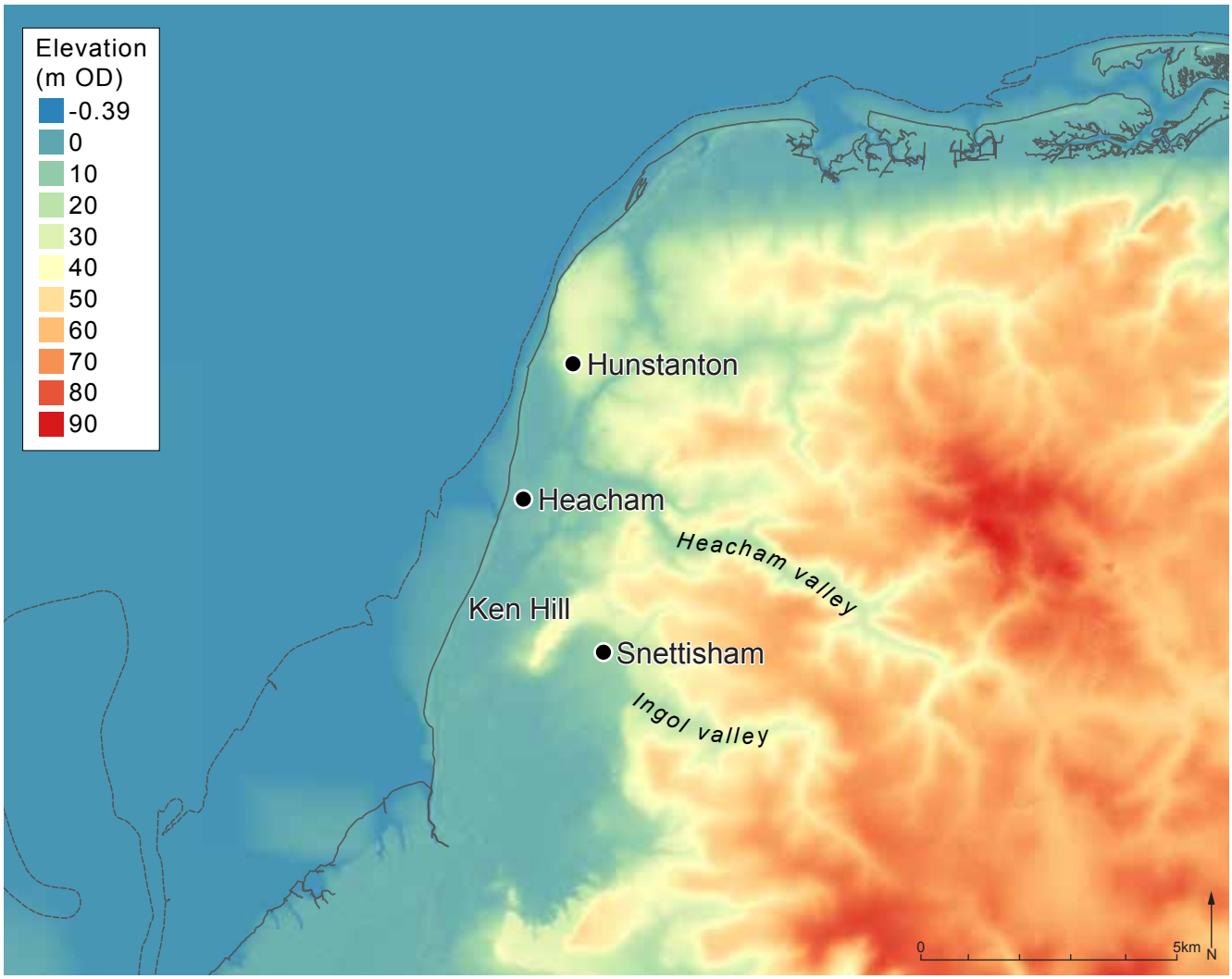


Figure 3.1 Elevation map showing the area around Snettisham. Ken Hill forms a promontory out into the Wash

Figure 3.2 Aerial photograph showing the view north-west across Snettisham village towards the Wash. Ken Hill is the wooded promontory on the centre left; the 'gold field' lies on the lower slope of the hill, on the right-hand edge of the wooded area (image ©aeroengland.co.uk)

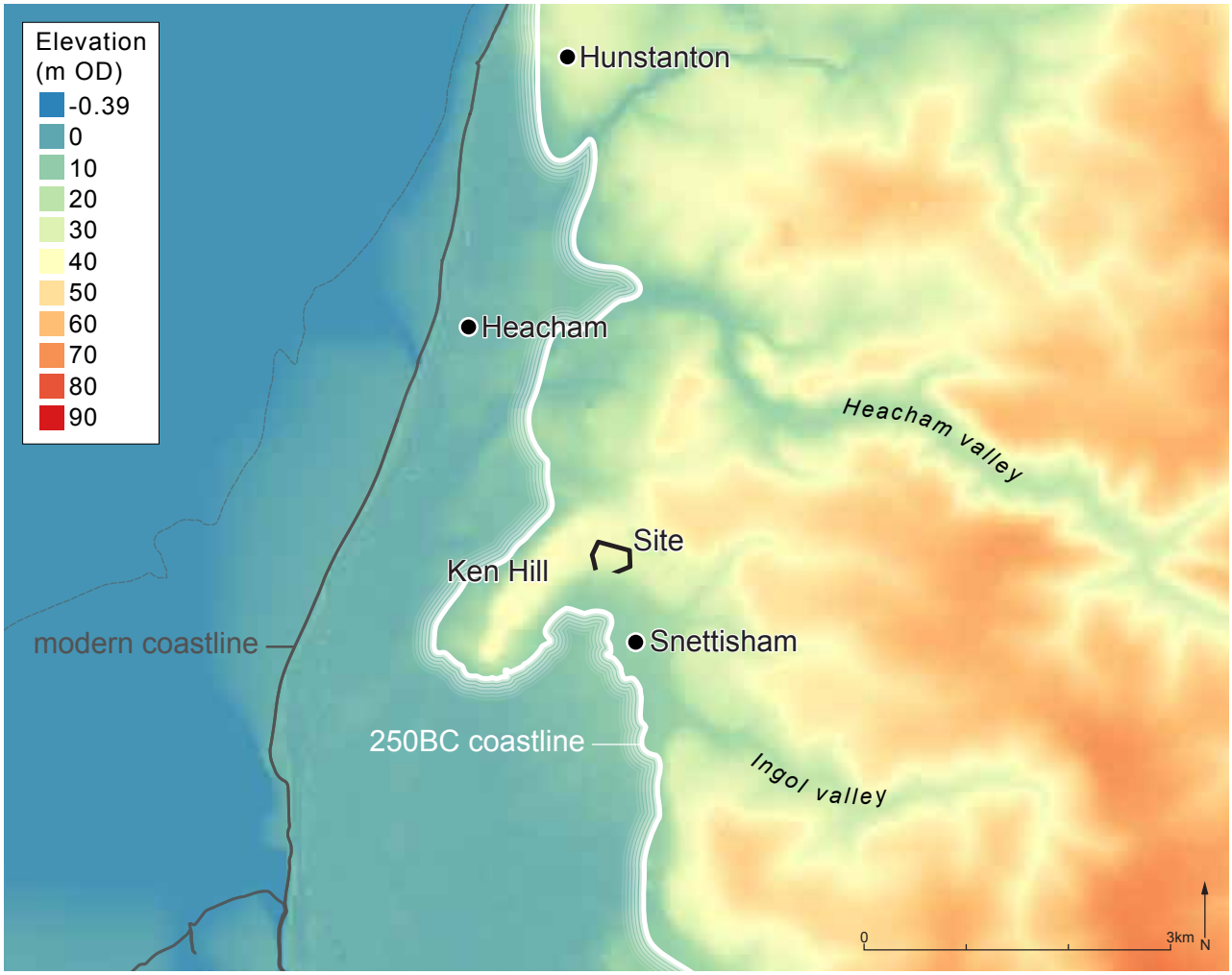


Figure 3.3 Map showing likely Late Iron Age sea levels in the area around Snettisham

would have been bordered by an inlet from the Wash. Today, the River Ingol runs just to the south of the Ken Hill promontory, rising from lime-rich springs in the chalk uplands near Shernborne, and flowing out into the Wash.

The hoard field is bounded on the east by the King's Lynn to Hunstanton Road, the A149, and to the south by the driveway to Ken Hill House (**Fig. 3.5**). To the west is a low, coniferous plantation, around which the field wraps to the north (**Figs 3.4–5**). Beyond it is a mature deciduous woodland. As the land slopes away to the south there is an open plantation of poplars, with the ground dropping away to a wide basin. Historically, the field is known to have been used for lavender cultivation, but at the time of the first season of the BM excavations (1990) the crop was sugar beet.

Today, the rest of the Ken Hill promontory is wooded, but this has not always been the case. Substantial woodland clearance had taken place in the region by the Late Bronze Age or Early Iron Age (Davies 2008, 138) and by the Late Iron Age much of Norfolk was intensively farmed (Davies 1996, 64–5), though the pattern was varied, and some regions were a patchwork of woodland, heathland and farmland, even within quite a small area (Hutcheson 2004, 4). The presence of a prehistoric field system covering what is now the hoard field shows that at least parts of the promontory were treeless/cleared perhaps as early as the Neolithic (see Ch. 5). Some features interpreted by Ian Stead and his team as tree bowls (such as the pit just to the west of Hoard F) indicate tree growth at the site, but this is difficult to date. In Faden's 1797 map of Norfolk, there is only a small area of woodland, 'Caen Hill Wood', shown at the north-eastern (inland) end of the promontory (**Fig. 3.6b**), though the rectilinear bounding of the woodland suggests this was either a planation or the remnant of once more extensive tree cover. By the time of the first Ordnance Survey (1885, **Fig. 3.6c**), the entire lower part of the promontory was wooded, as it remains today. Neither of these maps show any woodland coverage in the hoard field itself. Today, the western half of the hoard field is covered with a tree plantation. This is absent in pre-WWII photographs of the field, but the first half appears in 1946 aerial photographs, and by the time of 1988 aerial photography (**Fig. 3.6d**) it had reached its present extent. The newer trees in this plantation are believed to have been planted around 1960.

With the exception of these wooded areas, the land around Ken Hill today consists primarily of arable fields. From at least the 16th century, the area just to the south of the promontory (south-west of the village) was common land used for grazing and also as a rabbit warren (Whyte 2009, 91–124; Bailey 1988). This perhaps goes some way to explaining the heavy rabbit disturbance found throughout the site, which has unfortunately in some instances impacted upon our ability to reconstruct stratigraphic sequences.

Figure 3.4 The 'gold field' in winter 1990. Image taken from south of the drive bordering the field, looking north-west, across the 'gold field' as the slope rises slightly towards the adjacent conifer plantation

Figure 3.5 The Snettisham 'gold field' in its wider local context

Figure 3.6a An outline of the current field boundaries

Figure 3.6b The area around Snettisham and Ken Hill in Faden's 1797 map of Norfolk

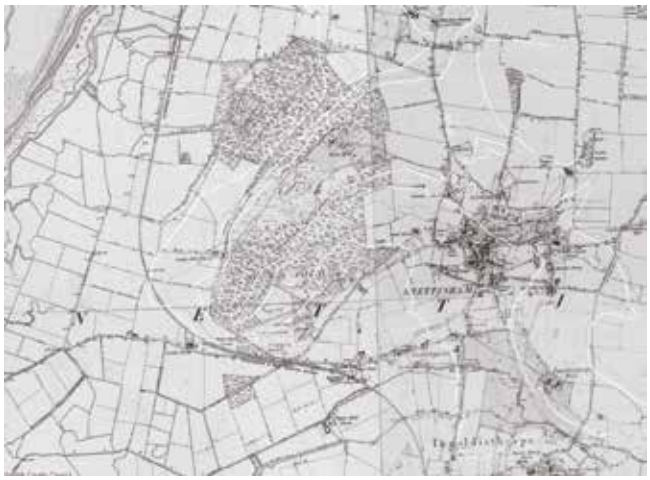


Figure 3.6c The area around Snettisham and Ken Hill in the first edition Ordnance Survey map (survey 1885, published 1886)

Figure 3.6d The area around Snettisham and Ken Hill in 1988 aerial photography carried out by BKS on behalf of Norfolk County Council. Image © Norfolk County Council

Until very recently, the landscape has been used to support a mix of farming with sport – the wood to the west and general layout of hedgerows and copses is testament to the pheasant shooting associated with Norfolk Estates of the last two centuries (indeed, a great many recent spent cartridge casings were recovered from the hoard field itself). With the Wash less than 3km to the west, wildfowling – particularly for winter geese – provided another important local pastime. Today, the area known as 'Wild Ken Hill', is a conservation area where practices such as sustainable agriculture and 'rewilding' are actively promoted.

The archaeology of Snettisham and immediate environs

The Norfolk Historic Environment Record (NHER) records widespread evidence for human occupation across multiple periods at Ken Hill (NHER 1487). This includes Mesolithic flakes and points, a Neolithic saddle quern and a possible working area used to produce Neolithic or Early Bronze Age stone artefacts. The ceramic and lithic evidence from the BM excavations supports the idea that there was Neolithic settlement in the immediate vicinity, with pits containing domestic or pre-midden material. There was a substantial amount of depositional activity in the area during the later Bronze Age; at least five and possibly six Bronze Age hoards have been recovered from the vicinity of Snettisham village, and indeed the site itself (Ch. 7, and see Lawson 2018).

In addition to the torc hoards at Ken Hill, there are also other nearby finds of Iron Age objects (**Fig. 3.7**). A copper alloy terret (rein-ring) decorated with punched dots and inlaid red glass enamel was discovered around 700m north-north-east of the hoard in *c.* 1971 (NHER 2779). It is on display in the Boudica Gallery at NCM (NWHCM: L1975.11). A pair of copper alloy objects decorated with birds' heads and thought to have been drinking horn terminals were also discovered by Charles Hodder in 1989 just to the east of the 'gold field', on the other side of the road from King's Lynn to Hunstanton (S.253–4; NHER 25249) (Gurney 1990). The findspot was investigated in 1992 by Stead and his team (Trench SA15) but other than revealing that the site was located near a spring, nothing of note was discovered (Ch. 5). A hoard of two local uninscribed Iron Age gold coins (*c.* 80–60 BC) was also discovered in the vicinity of Ingoldisthorpe in 1988 (IARCH-BD63EC; de Jersey 2014, no. 187).

Despite these finds, there is no definitive evidence for contemporary Iron Age settlement on Ken Hill itself. This does not mean that the site was isolated during the main period of deposition in the 2nd and 1st centuries BC, since

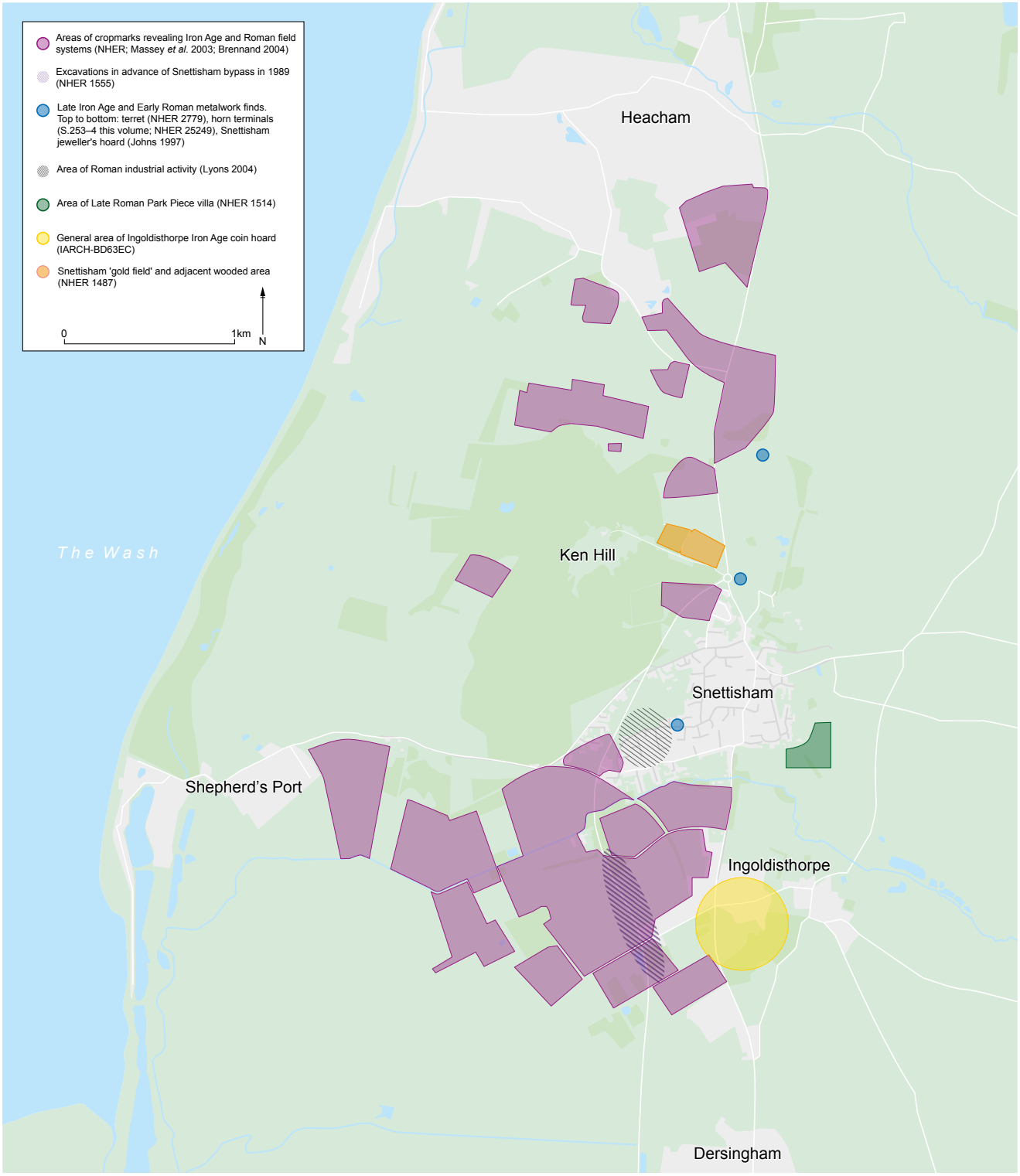

Areas of cropmarks revealing Iron Age and Roman field systems (NHER; Massey et al. 2003; Brennand 2004)
Excavations in advance of Snettisham bypass in 1989 (NHER 1555)
Late Iron Age and Early Roman metalwork finds. Top to bottom: terret (NHER 2779), horn terminals (S.253–4 this volume; NHER 25249), Snettisham jeweller's hoard (Johns 1997)
Area of Roman industrial activity (Lyons 2004)
Area of Late Roman Park Piece villa (NHER 1514)
General area of Ingoldisthorpe Iron Age coin hoard (IARCH-BD63EC)
Snettisham 'gold field' and adjacent wooded area (NHER 1487)
0
1km
N
Heacham
The Wash
Ken Hill
Snettisham
Shepherd's Port
Ingoldisthorpe
Dersingham

Figure 3.7 Iron Age and Roman period sites and finds around Ken Hill. Hoard and object findspots are indicative only

Iron Age settlement in Norfolk is often difficult to detect archaeologically. For instance, the primarily acidic soils means that bones, both animal and human, tend to be poorly preserved (Hill 2007, 28; Tremlett 2011, 34). No human remains were found at Snettisham, and the nearest site with evidence for funerary activity is the possible Iron Age cremation from Heacham (NHER 1401, found before 1911 and now lost). Pottery from the BM excavations provides evidence for likely feasting activities in the Late Bronze Age to Earlier Iron Age, and it is quite possible that many of the people visiting the site, especially in this period, lived nearby.

Aerial photography and geophysical survey has identified cropmarks representing extensive systems of fields, droveways and enclosures in the area around Snettisham (**Fig. 3.7**). These are part of a wider band of such cropmarks on this area of the north-west Norfolk coast, running north–south between Heacham and Dersingham. These farmsteads occupied the greensand belt, between the 10m and 35m OD contours, with the land sloping down towards the saltmarshes and fenland to the west, and rising up towards a chalk ridge in the east (Massey *et al.* 2003, 339; Brennand 2004). Massey *et al.* (*ibid.*) note that the field systems seem to have developed

in a piecemeal manner. While there is no single overarching system of land division evident in these complex multi-phase cropmarks, general alignments of fields and droveways can be followed over distances of up to 1.5km. They propose that the east–west droveways may have provided seasonal transhumance routes for moving stock between the uplands and the saltmarsh.

Most of these field systems have not been excavated, and so they remain hard to date. One concentration of cropmarks in the Ingol valley just south of Ken Hill was explored in 1989 prior to the construction of the A149 Snettisham bypass (**Fig. 3.7**). This revealed an extensive Roman settlement with several phases of occupation and industrial activity, spanning from at least the 1st to 3rd centuries AD (Flitcroft 2001). It is possible some elements of the field system date back to the Iron Age, and there are certainly Late Iron Age finds distributed across the area of enclosures south of Snettisham village, including a strainer vessel spout now in King's Lynn Museum (NHER 34531; Albone *et al.* 2007, 65–7). This may have been the closest area of settlement to Ken Hill in the Late Iron Age, and if so the position of the hoard field on the lower slopes on the inland side of Ken Hill would have afforded views between the settlement and main area of depositional activity.

The field system revealed through geophysical survey in the 'gold field' at Snettisham (see Ch. 5) is most likely part of this wider agricultural landscape. In this case, it appears to be cut by the enclosure ditch which partially surrounds the area containing the hoards. Pottery finds from the BM 1990–2 excavations suggest that this ditch had begun to silt up from the mid-1st century to mid-2nd century AD, and there is no evidence that it was constructed significantly earlier. All that can be said for certain about the underlying field system is that it most likely pre-dates the enclosure of the hoard field. Overlaying de Bootman's geophysical survey data from the 'gold field' (Ch. 5) with the findspots of the Late Iron Age torc hoards (Ch. 8) suggests the tantalising possibility that the two may be contemporary, with the hoard findspots seeming to relate to the field system (see **Fig. 8.2a–b**).

Deposition was still happening up at Ken Hill in the 1st century AD (Hoard P dates to this period, and Hoard M most likely dates to the 1st or 2nd centuries AD). Nearby (**Fig. 3.7**), the Romano-British Snettisham jeweller's hoard (found during construction of a house in the village itself) was buried in the mid-2nd century AD (Johns 1997). This deposit consists of Roman coins and jewellery, including numerous finger-rings and bracelets. It also contained twisted gold wires with a very similar form to some of those from the Snettisham torcs. Metal analysis revealed these wires contained around 85% gold, which is the same as many of the artefacts from the 'gold field' (Ch. 17). Indeed, in her report on the Roman jeweller's hoard Catherine Johns concluded, '…it is difficult to escape the conclusion that some of this metal derives from Snettisham Iron Age hoard material' uncovered intentionally or otherwise in the Roman period (Johns 1997, 46). Johns (*ibid.*, 73) also speculated that the Roman jewellers may have been descendants of the craftspeople who made the Iron Age artefacts.

The area around Snettisham continued to remain important well into the Roman period; Late Roman, early medieval and medieval pottery has also been unearthed in surrounding areas, and the 'gold field' itself has produced evidence for Late Roman iron production. There is a Roman villa at Park Piece, on the other side of Snettisham village, less than 1.5km from the hoard field (**Fig. 3.7**, NHER 1514), where finds from excavations in 1931 suggest a main period of occupation in the 3rd to 4th centuries AD. As well as domestic material, these excavations uncovered evidence for iron processing, including hearths and large quantities of iron-smithing slag. Evidence for later Roman industrial activity was also revealed during excavations in Snettisham village (**Fig. 3.7**, Lyons 2004).

If evidence from the Snettisham jeweller's hoard hints at the disturbance and recovery of at least some Iron Age torc hoards in the Roman period, there may also have been later, unrecorded discoveries in the Ken Hill hoard field. A final note from the NHER describes a local legend current in the early 20th century that children were not allowed to play in the Ken Hill woods 'because there is gold in there'. This information was told to an E.B. Green by an old lady and was relayed to Rainbird Clarke sometime around 1950. It indicates a folk memory of discoveries that must precede the first recorded finds from the late 1940s.

The wider context: north-west Norfolk

The overall picture of north-west Norfolk in the Iron Age, particularly along the fen-edge, is a well-settled landscape dotted with small, unenclosed villages. Davies (1996, 73–5; 1999, 30–2; 2008 95–100) has also identified six enclosed medium-sized 'forts' located in the west of the county, each with earthworks enclosing 1.5 to 6 hectares, and dating from the 5th to 1st centuries BC. Warham Camp, Holkham, and South Creake are all within 30km of Snettisham on or near the north Norfolk coast; Narborough and Bawsey lie a similar distance inland to the south (**Fig. 3.8a–b**). Thetford Castle lies much further south. Although they are mostly at fairly low elevations, their topographic locations often appear significant: Holkham occupies a spit along the coastal marshes, and South Creake is situated at the edge of a plateau, with views of the sea to the north (Penn 2006, 22). Thetford Castle occupies a site of strategic importance, on a chalk rise overlooking fords where the Icknield Way crosses the Thet and Little Ouse rivers, and is enclosed by bivallate earthworks to the north, and a meander of the River Thet to the south. There is little evidence for intensive occupation or domestic activity at these sites, and Davies and others generally interpret them as having a special significance for their communities, perhaps as public spaces used for political, ceremonial or ritual events and gatherings (Davies 1996, 73–5; Penn 2006). Whilst none of these sites have depositional activity comparable to Snettisham, torcs and torc fragments have been found near Bawsey. The earthworks at Bawsey are undated, but Davies (2008, 99) argued that torcs and torc fragments found in the area suggested it was a site of 'some importance' in the Iron Age.

Aside from these large-scale enclosed sites, most settlement in Iron Age Norfolk appears to have been unenclosed, what J.D. Hill (1999, 190) has called a 'spurgy'

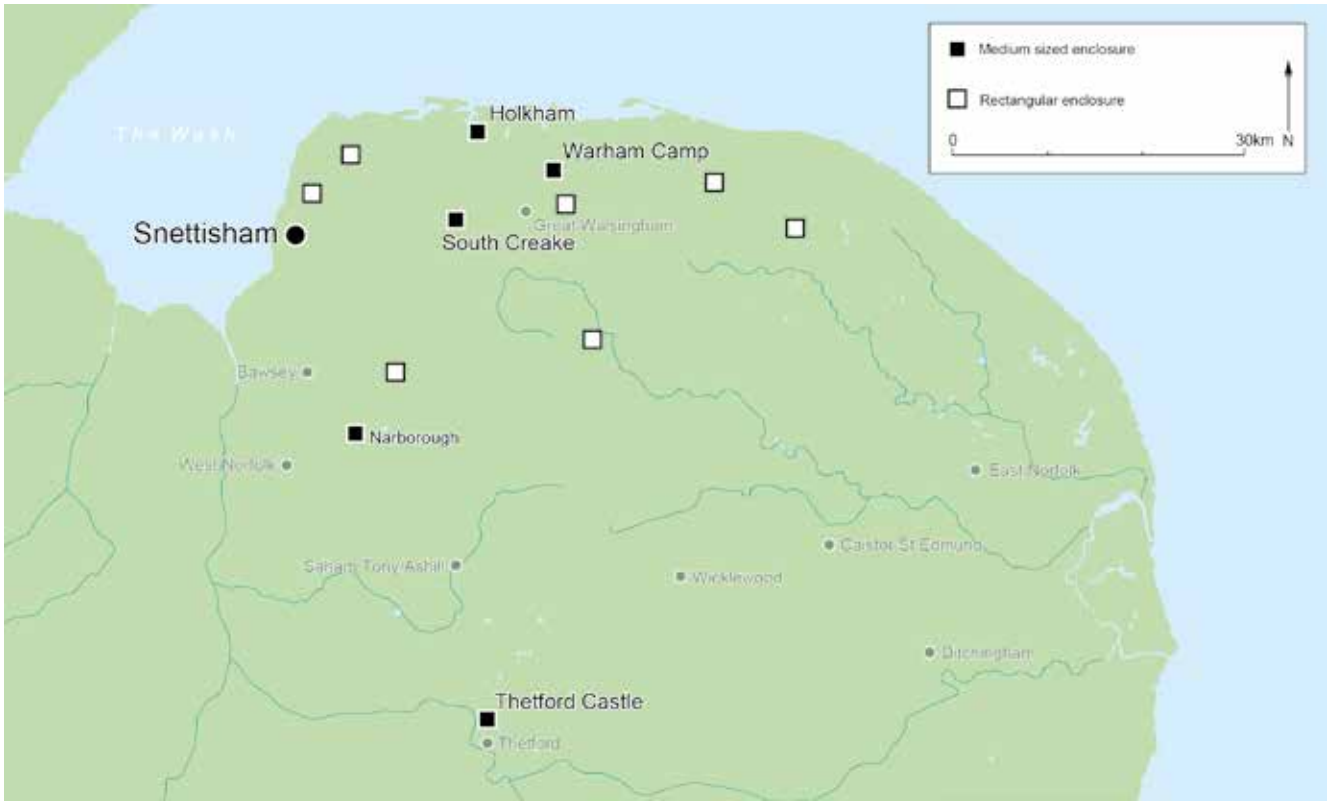


Figure 3.8a Iron Age fort sites in north-west Norfolk, in relation to Snettisham

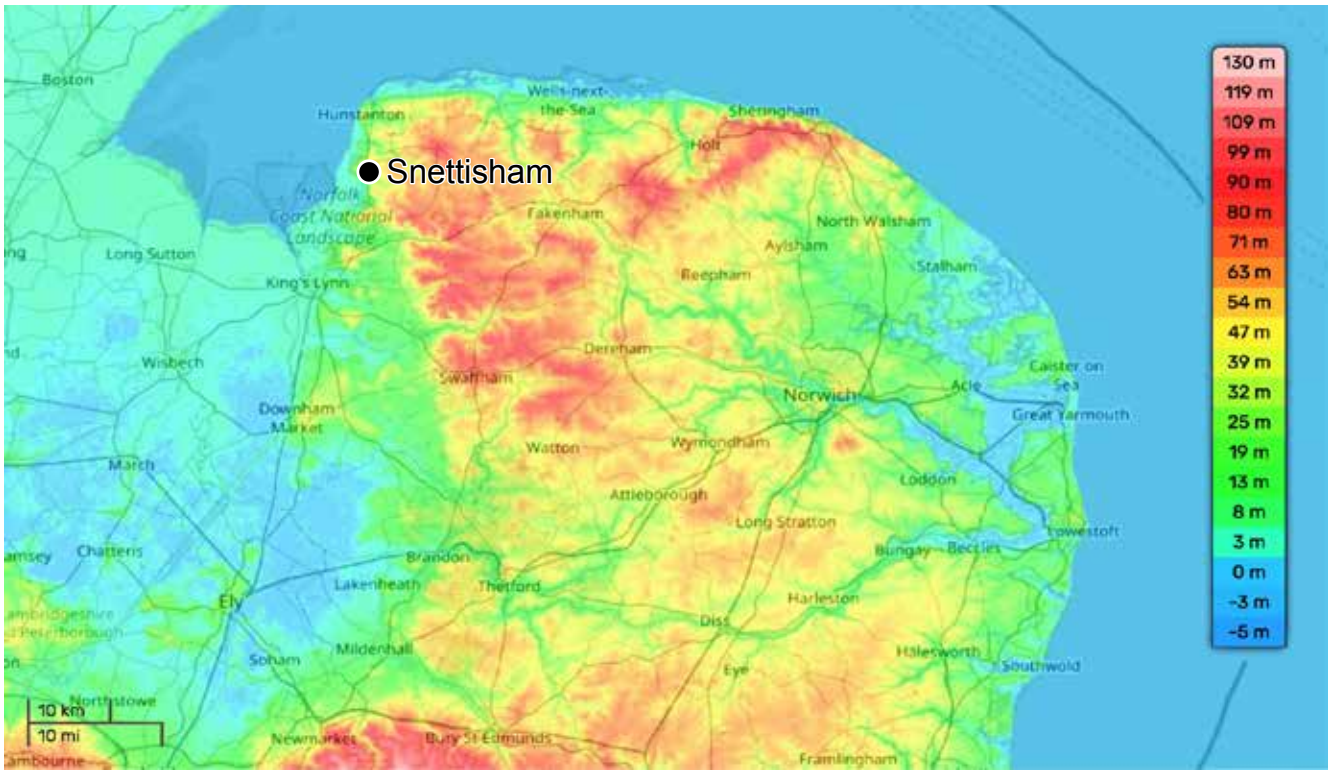


Figure 3.8b Topographic map of Norfolk

landscape with 'spreads of material and settlement components extending over large areas: relatively large, unenclosed, agglomerations of round-houses and other structures.' Davies (2008, 119–25) noted that some of these dense agglomerations of settlement (Caistor St Edmund, Saham Toney/Ashill and Thetford), whilst unenclosed, otherwise have a density and variety of finds and activity that can be compared to *oppida* sites in southern England, and may thus represent regional centres. Though others, such as Hill (1999), prefer to avoid the loaded term '*oppida*', there are clearly large, denser agglomerations of settlement in certain areas that appear to have hosted a variety of activities. Research by the Norfolk National Mapping Programme (NMP) has highlighted the presence of more Iron Age enclosures than has been previously recognised (Tremlett 2011, 27). These range from small sites which may

Figure 3.9 Sites in the vicinity of Snettisham with evidence for Iron Age and Early Roman metalwork deposition. Aside from the 'gold field' at Snettisham, the findspots shown here are indicative only

have had an agricultural function to large complexes of fields and enclosures up to a kilometre in extent that may represent 'enclosed components' of much larger open settlements (*ibid.*, 29–30).

Snettisham is part of a spur of downland which appears to be another such dense agglomeration of intense activity (SHARP 2014, 48–9), stretching from Fring in the east to the Wash in the west, and bounded to north and south respectively by the Heacham and Ingol rivers (**Fig. 3.9**).

This wider area of activity in the immediate vicinity of Ken Hill can be divided into at least five sites with evidence for Late Iron Age coin hoard or metalwork deposition. Hoards have been found at Heacham, Ingoldisthorpe, Sedgeford and Fring and there have also been a cluster of finds to the east (**Fig. 3.9**).

Sedgeford (NHER 1609) lies inland, around 3km to the north-east. Here, a multi-phase site has been excavated over a number of years as part of the Sedgeford Historical and Archaeological Research Project ('SHARP'), a community archaeology project. This has produced evidence for possible Iron Age settlement and Late Iron Age ritual activity in the 1st centuries BC and AD. This is focused in several different areas. On a low hilltop just to the south of the River Heacham, a gold alloy torc of a type similar to those seen at Snettisham was recovered in two parts (one discovered in 1965 and the other in 2004, Moshenska 2004, 8–10; see Ch. 21), and metal-detector survey has revealed several concentrations of Iron Age and Roman metalwork. The excavation team interpret this spread as evidence of a large hilltop sanctuary site, perhaps associated with a cropmark complex of five or six nested rectilinear enclosure ditches that they liken to the Late Iron Age sanctuary and ritual centre at Fison Way, Thetford, Norfolk (SHARP 2014, 33–4). Further, perhaps related, Iron Age activity has been identified at the foot of the hill, just to the north, at a multi-period site known as the 'Boneyard' due to the presence of an early medieval cemetery (SHARP 2014, 37–45). Here, a hoard of 39 Gallo-Belgic E staters concealed in a cow bone was excavated in 2003 (IARCH Reid 2003, 21–4; Davies *et al.* 2004; Dennis and Faulkner 2004), located adjacent to a small ditched enclosure at the base of the valley (Moshenska 2004, 11–12). A number of other 'special deposits' dating to the Iron Age have been found in this area (SHARP 2014, 42–3). Immediately to the south of the enclosure, slightly upslope from the valley bottom, an intact horse burial associated with Iron Age pottery was found in close proximity to a large east–west ditch containing late 1st-century AD Roman fineware and imitation Gallo-Belgic pottery (Reid 2003, 21–4; Moshenska 2004, 11–12; Moshenska 2005). The scale of excavations at the Boneyard makes it hard to fully reconstruct the nature of the Late Iron Age activity, but it is likely that the landscape was settled, perhaps divided into small farmsteads. The small enclosure at the base of the valley, where the coins were deposited, may

have been a ritual site contemporary with but smaller than the hoard field at Snettisham, and appears to have been within a site defined by linear ditches on a scale not dissimilar to those seen at Snettisham. Although their full extent and nature is unclear, the SHARP team (2014, 46) suggest that, 'The big ditches, probably with associated banks and perhaps palisades, would have been imposing features, designed to mark out certain spaces along the water's edge as sacred.'

There have been a number of Late Iron Age finds around 3.5–4.5km to the east of the Snettisham hoard field, along Fring Road and Bircham Road. Metal-detecting in 1988 recovered a crescentic copper alloy plate with inscribed and red glass enamel decoration (NHER 24432). It is recorded in the NHER as a possible shield mount, thought to date to the 1st century AD but, given harness fittings are far more common than shields and are frequently decorated with glass enamel and inscribed patterns, it more likely represents a fragment from a harness fitting, probably a terret. Based on the description of its decoration, it could date to the 1st century BC or the 1st century AD. A Late Iron Age brooch was discovered nearby in 1948 (NHER 1673), and two Iron Age pottery scatters were noted in 1987 (NHER 23701; NHER 23702). At least one Iron Age coin hoard has also been discovered in this general area, confusingly sometimes referred to simply as being from 'Snettisham' (de Jersey 2014, 308–10, no. 195, Shernborne I and II; Talbot 2017, 225, Shernborne A and B). Coin finds have been reported over a number of years and, like Ken Hill, this may also represent a site which saw multiple acts of deposition over the Late Iron Age and Early Roman periods (see Ch. 15).

Iron Age coin hoards have been found at Heacham (IARCH-126807; de Jersey 2014, no. 185) and Ingoldisthorpe (IARCH-BD63EC; de Jersey 2014, no. 187), both consisting of 1st-century BC uninscribed local gold coins. Two Iron Age coin hoards have also been found at Fring, slightly further to the east. One is a group of 170 Gallo-Belgic coins dating to the mid-1st century BC (IARCH-744618; de Jersey 2014, no. 183), the other is a mid-1st-century AD Icenian silver hoard (IARCH-B1844F; de Jersey 2014, no. 182; Chadburn 1990; Gurney and Chadburn 1991).

Even beyond the general environs of Snettisham, north-west Norfolk saw extensive metalwork deposition in the 1st centuries BC and AD. There are a number of torc finds from further afield, such as at North Creake, 15km east of Snettisham (see Ch. 22), and a hoard of harness fittings stylistically dated to *c.* 150–50 BC (Clarke 1951b) was found at Ringstead, around 6km to the north of the 'gold field'.

In a complicated and shifting world of relatively ephemeral settlement, fixed sites of activity with distinctive topographic locations (such as Thetford Castle, South Creake and Snettisham) may have acted as nodes, tethering communities to the landscape and taking on particularly important social, political and religious roles. Taken together, the evidence suggests a well-settled Late Iron Age and Roman landscape in north-west Norfolk, with major enclosed settlements to the south and west of Snettisham and probably smaller villages and their associated droveways and field systems in the immediate vicinity. This was an area which saw extensive metalwork deposition in the 1st centuries BC and AD, and most likely a regional centre. Ken Hill stood out as a significant landmark and has produced by far the most impressive hoard deposits, but many other nearby sites also saw deposition of Late Iron Age and Roman metalwork, suggesting a wider, closely interlinked, landscape of deposition.

Chapter 4
The History of Discoveries at Snettisham

Julia Farley and Jody Joy

This chapter presents an expanded and revised version of notes first prepared and made available to the authors by Dr Ian Stead.

This chapter summarises the history of discoveries at Snettisham, where finds have been made over a period of around 70 years, beginning in 1948. **Figure 4.1** summarises the finds and areas of investigation by date. Some of this information has already been presented in Chapter 2, but it is summarised here for the purpose of reporting a complete history in one place.

1940s–1960s: Hoards A–E and Rainbird Clarke's excavations

The first five hoards were found between 1948 and 1950, following a period of deep ploughing which disturbed the deposits (**Fig. 4.1**). Hoard A (a group of at least four tubular torcs, three of them largely complete, **Fig. 4.2**) was uncovered on 12 November 1948 by tractor driver Mr P.L. Williamson (Clarke 1954, 28–32). The next day his plough also unearthed Hoards B and C: groups of fragmented gold and copper alloy torcs, rings, ingots and, in the case of Hoard C, potin coins. The finds were reported by Mr Williamson to his foreman but were deemed as being of low importance, and they remained in a heap in the field, visible from the main road from Snettisham to Hunstanton, for about a week. Subsequently, Mr Linnaeus Chilvers, the owner of a local lavender cultivation company, asked to examine the finds. Unfortunately, when the objects were gathered for this purpose, some parts of Hoards B and C became intermixed (thus, in the catalogue, while some finds can be securely attributed to either Hoard B or Hoard C, others are grouped together and designated as 'Hoard B/C'). Mr Chilvers quickly recognised the remarkable nature of the assemblage and informed Ivan Thatcher, then President of the Norfolk Research Committee. Mr Thatcher passed on details of the discovery to Roy Rainbird Clarke, who was then both Deputy Curator of Norwich City Museums and Keeper of Archaeology at Norwich Castle Museum. Clarke first visited the site on 29 November, and collected additional fragments from the plough soil from the sites of each of the three hoards (Clarke 1954, 30). The artefacts were handed over to the coroner (Mr L.H. Atwood). At the coroner's inquest on 18 December, Hoard A was declared Treasure Trove and the gold torcs were held by the coroner on behalf of the Crown. Despite arguments made by Clarke that the finds should all be treated equally on the grounds of their archaeological significance, Hoards B and C were returned to the landowner.

In late December 1948, with assistance from the Norfolk Research Committee, Clarke conducted an excavation at the site (**Fig. 4.3**). The three hoards that had thus far been discovered were spread quite widely across the field, and Clarke determined that it was not practical to strip the entire area. He opted instead to investigate each of the hoard findspots and open a series of trenches across the intervening areas 'designed to ensure that the presence of any structures would be recognised' (Clarke 1954, 30). No structures or evidence of activity from any other period were discovered, but Clarke succeeded in locating more hoard finds *in situ*, including 12 gold coins from Hoard B (Cat. nos 1–12) and

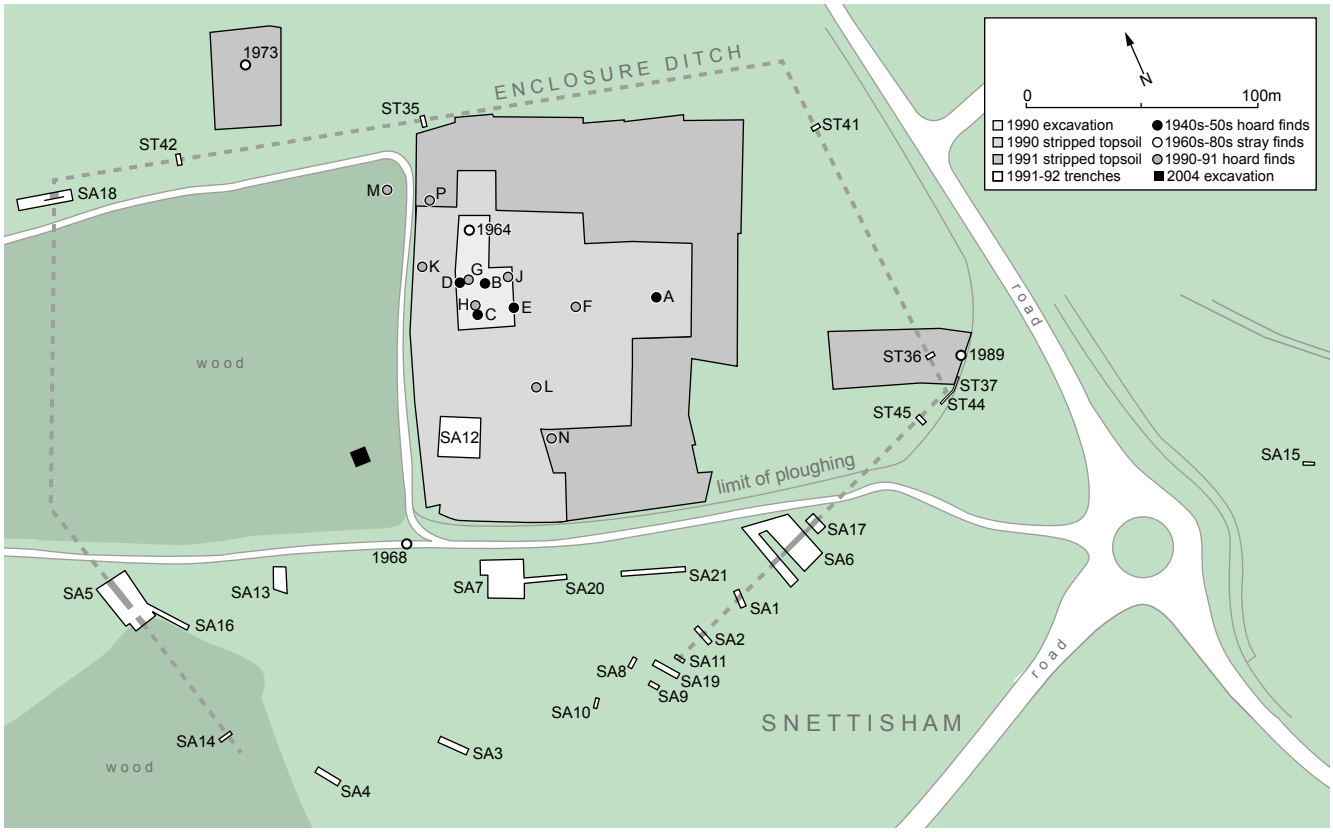


Figure 4.1 Findspots and areas of investigation by date

further gold torc fragments from Hoard A. The gold coins appeared to have been a discrete deposit. Clarke also found additional artefacts from Hoard B '... undisturbed beneath a stone adjacent to the gold coins' (*ibid.*, 36): a 'group' of eight interlinked objects (rings B.1a–h). These items were seized by the coroner on behalf of the Crown as Treasure Trove, this time without an inquest.

After a valuation made at the BM, the tractor driver was awarded £400 for finding the torcs and the Norfolk Research Committee received £25 for the gold coins. The BM waived its claim to the material so the National Art Collections Fund presented the gold torcs from Hoard A to Norwich City Museums. They subsequently also purchased the gold coins from Hoard B and in May 1949 the landowner, Sir Stephen Lycett Green, donated the remainder of Hoards B and C to Norwich City Museums.

Clarke's excavations at the site (**Fig. 4.3**) indicated that Hoard A had been thoroughly dispersed by the plough over an area of 15 by 4 feet (Clarke 1954, 35). Owing to the presence of iron nails, Clarke (*ibid.*, 35) suggested that Hoards B and C were originally contained in large wooden boxes, each around 3 feet square. It may well be that Clarke was misled by the nails as very many (most likely modern) nails were found in the plough soil during the excavations of 1990 and 1991 (Stead pers. comm.; Ch. 2); nails rarely appear to have been used in boxes in the Iron Age. As some of the artefacts, including the excavated gold coins from Hoard B, were found 'lying on edge', Clarke also suggested that within Hoards B and C some objects may have been contained within separate leather or textile bags, perhaps (based on the group of interlinked objects) grouped according to size rather than metal composition (*ibid.*, 36).

The field was deep-ploughed again in the autumn of 1950. On 17 November, tractor driver Mr T.F. Rout discovered Hoard D when he noticed his plough had brought a torc to the surface in addition to a small ring. The torc was damaged by the plough and the ring was accidently broken by the police, who were called out to deal with the find. These artefacts were declared Treasure Trove at an inquest on 23 November. The next day, Mr Rout uncovered Hoard E, comprising perhaps the most iconic find from the site, the so-called 'Great Torc' (**Fig. 4.4**). A matching bracelet was linked to it by a broken gold alloy torc threaded through its terminals, and a gold coin (Cat. no. 169) was subsequently discovered within the ropes of the neck-ring. These items were declared Treasure Trove without inquest and Mr Rout was awarded £1,850 for his discoveries. Both hoards were deemed as being of national importance and so were acquired by the BM. Hoards D and E may originally have contained further artefacts but no archaeological excavations were carried out in this area until the 1990s.

In January 1952, Charles Lewton Brain investigated the wooded area adjacent to the 'gold field' where the torcs had been discovered and found a 'dump of mixed refuse' (NHER 1487). In addition to pottery dating to the Iron Age and Roman periods, Lewton Brain recovered oyster shells, wall plaster, coarse red brick *tesserae* and animal bones.

1960s–1970s: stray finds

At least three complete gold/silver alloy torcs and one terminal were recovered as stray finds during ploughing at Ken Hill in the 1960s and 70s (**Fig. 4.1**; Burns 1971). In March 1964, a complete torc (S.17) was discovered by a Mr Laud whilst drilling sugar beet. It was found in the same

vicinity as Hoards B–E. In May of that year a fragmentary torc terminal (S.31) was also discovered nearby by Mr G.W. Button. An inquest was held at Dersingham on 15 August and both torcs were declared Treasure Trove and subsequently acquired by NCM (NCM 1965.30). On 29 February 1968, a further complete torc (S.16) was discovered on the edge of the field by Mr Dix, a farmworker. It was probably dragged by the harrow and thrown off when turning (Burns 1971, 228). This torc was declared Treasure Trove at an inquest on 18 September 1968 and is also at NCM (NCM 1969.55.3). A further torc (unpublished) (S.18) was discovered in 1973 about 130m north-west of where Hoards B–E were found. It was a surface find found in two pieces. Again, it was declared Treasure Trove and is now at NCM (NCM 1977.307). Finally, a note recorded by Tony Gregory in the NHER for Snettisham (NHER 1487), indicated that a further electrum loop terminal torc may have been discovered sometime in the late 1970s but was never officially reported.

1980s–1990s: Hoards F–P

Over the winter of 1983–4, the Norfolk Archaeological Unit conducted a detailed fieldwalking programme in the 'gold field' but uncovered no Late Iron Age artefacts, leading them to conclude that the site had been destroyed by ploughing (NHER 1487). This was assumed to be the case until 1989 when Charles Hodder was given permission to use his metal detector on the site after the field had been harvested. He discovered torc fragments (S.25, S.27, S.28) and coins (Cat. nos 219, 234 and 259). An inquest held at King's Lynn in December 1989 declared the torc fragments and a gold stater Treasure Trove; the other coins were declared not Treasure Trove. Both Treasure Trove and non-Treasure Trove items were acquired by NCM. Just to the east of the site, where Trench SA15 would later be located, Hodder also discovered two horn terminals (S.253–4) in 1989.

Figure 4.2 The three more or less complete tubular torcs from Hoard A, discovered in 1948 and subsequently restored (see Ch. 16). Norwich Castle Museum, 1949.74.1, 1949.74.2 and 1949.74.3

Hoard F

With permission from the landowner, Hodder returned the following year and on 25 August 1990 he discovered what later became known as Hoard F, comprising a huge quantity of fragmentary gold, silver and copper alloy artefacts, and nine gold coins, all originally contained within a copper

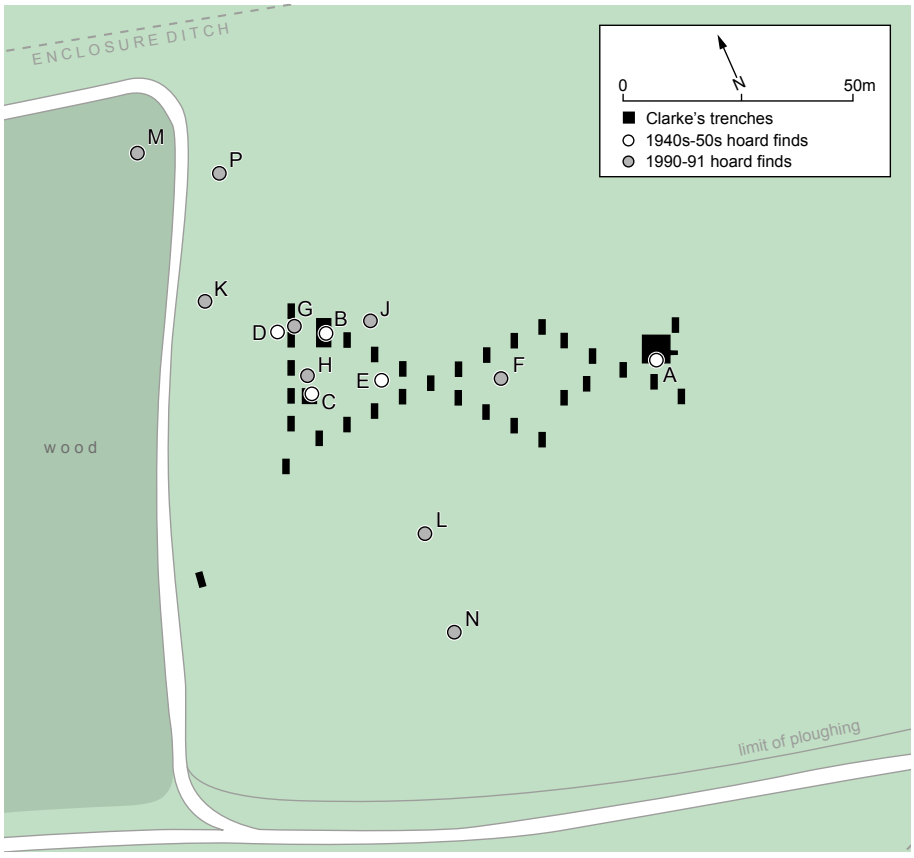


Figure 4.3 Clarke's 1948 excavations (after Clarke 1954)

Figure 4.4 Tom Rout holding the Great Torc and other associated finds (Hoard E) shortly after its discovery in 1950 (image: *Eastern Daily Press*)

alloy helmet (Ch. 14). Hodder knew the find was significant but was unable to report it immediately to local archaeologists due to the timing, explaining 'with a discovery of this importance I would normally [have] contacted The Norfolk Archaeology Unit. As the day was the Saturday of August Bank Holiday weekend this may have caused problems, I therefore decided to excavate the treasure myself' (letter from Hodder dated 3 September 1990, NHER 1487).

Hodder made a rough plan of the discovery (see **Fig. 12.1**) and recorded his account in a letter (see Ch. 12), but there are no photographs of the hoard *in situ*. When the area was re-excavated by a team from the BM (Chs 2 and 12) they uncovered a pit about 0.3m below present ground level and 0.35m in diameter, which is believed to be the original hoard pit. There were no remains or stains of the copper alloy container on the wall or base of the pit but some of the original sides had been overcut. In one place a piece of multi-strand wire torc lay undisturbed against the pit wall. Other small fragments of torcs and tiny pieces of copper alloy sheet were also discovered in the surrounding area and by sieving the backfilled soil from Hodder's excavation.

Hoard F was sent to the BM shortly after its discovery. The hoard and the fragments found about that time were the subject of an inquest on 7 March 1991. The gold and silver items were declared Treasure Trove and the BM paid Hodder a reward. Non-Treasure Trove items were purchased by the BM from the Trustees of the Ken Hill Estate.

Hoards G–L

Torc hoards G, H, J, K and L, some of the most spectacular and intact deposits from the site, were discovered during the first season of BM excavations in 1990. A full account of these discoveries and the 1990–2 excavations is outlined elsewhere in this volume (Chs 2, 5–12). They differed from Hoard F in that they each consisted largely of complete torcs which had been placed into defined pits in the ground in a 'nested' arrangement. Hoard G had been disturbed by animal burrowing but, like Hoard H, it consisted of two distinct levels, an upper fill and a lower fill, divided by a layer of soil but seemingly filled in as a single episode. Hoard L, the most spectacular, also had two separate deposits, but in this case a small upper pit had seemingly been dug into the top of a backfilled larger pit. Nevertheless, the two deposits seem to reference one another and it is unlikely they were separated by a long interval. Hoards J and K had been severely truncated by ploughing, and only their lower torcs remained *in situ*. There was no evidence for separate deposits or multiple fills within these hoard pits.

Hoard M

Charles Hodder discovered Hoard M (a group of large amorphous lumps of silver-copper alloy) while metal-detecting in the north-east corner of the wood in March 1991. One of the first tasks of the BM excavations in November 1991 was to investigate this findspot, but no further finds were made and there was no evidence of a hoard pit or other context.

Hoard P

Hoard P comprised over 6,000 coins, many contained in a silver bowl, which was discovered by clandestine metal-detector users sometime after the BM's first season of excavations had been completed late in 1990. Unfortunately, the hoard was located under the main spoil heap and so had not been found by Stead and his team. Fragments of the silver bowl left behind by the metal-detector users were later located by Stead (Ch. 2, P.1–7). Stead described the circumstances of the discovery of the hoard and its later dispersal through the international antiquities trade in his account of the Salisbury Hoard. It is worth quoting this at length:

> … I heard rumours that a coin hoard had been removed from the Gold Field about the time of our 1991 excavation. The informant had commented that our security had been inadequate, but I was quite confident that it had not been breached. I was told that I might get more information from Wobbly Dave who lived in Essex, drove a blue Cortina, and always had a pick-axe handle at the ready. He has earned his nickname because he would throw a wobbly if he was crossed. But my informant did not know how I could make contact, so sadly I was spared the experience. At the time I thought that the hoard, if there was a hoard, had probably come from another site.
>
> But I had to think again about 18 months later, in October 1993, when I was given some very precise information. The hoard had comprised 6,000 coins, and most of them had been to the USA and back. They had been found by a metal detectorist who had been looking for a torc, and he had been most disappointed with his 6,000 coins. The site was described

> precisely, by the track, adjoining the wood, half-way down the field. Most of the coins were silver, and they had been buried in a silver bowl; below it, as a separate deposit, were 500 gold coins and some curious ingots. My informant's description of the ingots matched exactly the unique ingots found at Essendon. Very few people knew about the Essendon ingots: this story sounded genuine. More impressive still was the mention of a silver bowl, which would have been extremely rare in the context of a Celtic coin hoard… (Stead 1998, 147–8).

Subsequently, several attempts have been made to piece together the possible contents of Hoard P from contemporary accounts and coin auction catalogue listings. This work is detailed further in Chapter 15.

2000s: Treasure finds and excavations in the wooded area

From 2003–6, with full permission and cooperation from the landowner, a group of metal-detector users, S. Brown, K. Elfleet and K. Jackson, undertook a survey of the wooded area immediately adjacent to the site of the 1990–2 excavations (**Fig. 4.1**). They used a mini digger to scrape off strips of topsoil and a metal detector to locate metal artefacts in the ground below the topsoil and from the bucket of the digger. Finds were recorded and plotted and a summary report produced by the finders. From 2005, Chris Berks of Chris Berks Archaeology aided recording and recovery of finds. All finds were initially reported to Andrew Rogerson at Norfolk Landscape Archaeology and metal artefacts were brought to the BM for the completion of Treasure reports undertaken by J.D. Hill, Eleanor Ghey, Ian Leins and Jody Joy (2003 T169, 2005 T487 and 2007 T697). A further Treasure find of several coins (2009 T666) was dealt with locally. The finds from these Treasure cases were acquired by NCM, and are included in the catalogue (Chs 14–15).

The 2003–9 Treasure finds represent at least three distinct periods of activity disturbed by recent agricultural activity, tree planting, as well as the action of tree roots. An antler cheekpiece (see Ch. 7) and miniature copper alloy socketed axe (S.9) most likely date to the Late Bronze Age or Earlier Iron Age (*c.* 1000–600 BC, see Ch. 7). Most finds date from the Later Iron Age and Early Roman period (*c.* 350 BC–AD 40/80, see Chs 8–9), including coins and fragments of torcs and copper alloy sheet, perhaps from metal vessels. Like the finds from the nearby 'gold field', these objects probably originated from hoards, in this instance disturbed by tree planting and tree roots. Finally, later Roman coins and pottery suggest a second period of Roman activity, a couple of hundred years later, perhaps related to the Romano-Celtic temple (see below), or other later Roman activity at the site (see Ch. 9).

Possible Romano-Celtic temple

Following the activities of the metal-detector users in 2004, which revealed the remains of a stone wall, an excavation was organised by Natasha Hutcheson at the request of the Norfolk County Council's Portable Antiquities Scheme Officer. A full account of the excavation is published elsewhere (Hutcheson 2011) but a summary is presented here and in Chapter 9. The excavations revealed the outline of a stone structure 6 x 6m in area, which Hutcheson interpreted as the remains of a small stone-built Romano-Celtic temple with a mosaic floor, painted plaster and a tiled roof (see **Fig. 9.2**). Hutcheson also postulated that the large enclosure ditch identified by Stead in his excavations (Ch. 2) demarcated a *temenos*, or sacred area, related to the temple (Hutcheson 2011, 45). According to Hutcheson, it was apparent from the outset of the excavation that the site had been severely disturbed. Some of this disturbance could be related to tree planting and the action of tree roots, or previous archaeological investigations such as the activities of Charles Lewton Brain in January 1952, who uncovered material perhaps also relating to the possible temple (see above) (NHER 1487). But Hutcheson believed these activities could not explain the level of destruction observed and she suggested the structure had been deliberately destroyed in the Late Roman period (Hutcheson 2011, 47).

Chapter 5
The Results of the 1990–1992 British Museum Excavations

Written and compiled by Julia Farley, with contributions by Tony Spence, Mike Cowell, Michael de Bootman and Sophia Adams

This structural report complements the narrative account of the BM excavations given by Stead in Chapter 2. The first section outlines the 1990–2 excavation methodology, while the second details the excavated archaeological features by year of discovery; a full list of contexts is included separately as Appendix 1.

The 1990–2 excavations, in particular the mid-winter 1990 excavations of the hoards, were carried out under challenging, semi-salvage operating conditions on a difficult geology. The hoards were vulnerable to theft (as indeed shown by the subsequent illicit detecting on the site resulting in the loss of Hoard P), and so it was not possible to carry out a full large-scale area investigation of the kind more commonly seen in modern development-funded archaeology. The report presented here is very closely based on the detailed notes recorded on site by the excavation team.

The results of a soil phosphate survey from 1991 are presented at the end of this chapter, as well as the results of two geophysical surveys carried out between 2006 and 2009. Whilst geophysical survey was carried out in 1991–2 (**Fig. 5.6**) and informed the placement of trenches, the technology of survey equipment and data-processing software has improved dramatically in the intervening decades. Thus the new surveys reveal features which were not identified in the 1990s.

Two programmes of radiocarbon dating have been carried out on the material from the BM excavations, one as part of the University of Oxford 'Technologies of Enchantment' project (Garrow *et al.* 2009), and the other as part of the preparation of this report. The results of both are included at the end of this chapter, as **Tables 5.2–3**.
For the purposes of this volume, the activity at the site has been divided into 6 phases:

- Phase 1: Early Neolithic (*c.* 3650–3400 BC)
- Phase 2: Bronze Age to Earlier Iron Age (*c.* 2500–350 BC)
- Phase 3: Later Iron Age (*c.* 350–60 BC)
- Phase 4: Latest Iron Age/Early Roman (*c.* AD 1–200)
- Phase 5: Late Roman (*c.* AD 350–400)
- Phase 6: Medieval and post-medieval (*c.* AD 1100 onwards).

These are mentioned below, and a phase-by-phase account of activity at the site is presented in Chapters 6 to 10.

The methodology for the 1990–1992 excavations
Tony Spence

In the first two seasons of excavation (1990 and 1991) a systematic metal-detection survey was adopted, aiming to ensure areas were cleared to the base of the plough soil. In the third (1992) season, local trenches were excavated over features identified by magnetometer survey (**Fig. 5.6**) in an attempt to get better, *in situ* dating evidence.

The standard process was to, first, contour survey the field. This was undertaken using a Zeiss Elta 4 Total Station, with a baseline established about 8m from the east side of the conifer plantation, and arbitrarily given co-ordinates 5000E/5000N–5000E/5100N and heights determined with reference to a bench mark located north-east of the field on the A149, at 35.17m OD.

Figure 5.1 Metal-detecting surveys were carried out along transects created by the box scraper

For the subsequent metal-detector surveys, initially string lines were laid out across the field *c.* 2.5m apart, and the transects surveyed by up to three team members using a variety of metal detectors. Subsequently the lines created by the box scraper were used (**Fig. 5.1**). Any readings were marked with plastic garden tags and another member of the team would hand excavate to retrieve the reading (**Fig. 5.2**). To speed the process, hand-held detectors were given to the retrievers. If a reading produced an archaeologically significant item, the findspot would be surveyed using the Elta. Once a strip of say 25 x 50m had been cleared, a bulldozer pulling the box scraper would make another run, and remove about 5–7cm of soil. Two members of the team would follow the box, and two more, one on each side, look at what was being pulled up by the machine, and walk the spoil heap as it was dumped. With practice, the team was able to keep up a continuous process of detecting, excavating, recording and machining. Depending on the depth of the soil, up to six passes were required to get down to the base of the plough soil. The machine would then move to a new adjacent area, but dump the soil over the previously stripped area.

The team found that detection signals were made up to *c.* 12cm in depth, but there was huge variability (as would be expected) depending on size, orientation, metal type and soil condition. Generally, gold, lead and iron gave good signals, tin foil excellent, but base-metal coins, such as potins, were virtually undetectable.

Occasionally the detecting signals proved to be more significant than a stray find disturbed by the plough. Given that these were hoards of torcs *in situ*, after confirmation that there was something there, the location was protected by an upturned bucket, and machining continued around it. Once the area had been cleared, a small tent was positioned over it, and excavation commenced. For Hoards J, K and L this happened over weekends when the machine was not operating (**Fig. 5.3**).

At the close of the first season, and in the second and third, in specific magnetometer-surveyed locations, the base of the plough soil was cleaned to inspect archaeological features. The weathered surface of the carrstone is far from uniform in its natural state, and irregular sand-filled cracks occur; the stone itself is lying in thin beds dipping to the east which break up very easily. At this close to the surface the stone is soft, heavily weathered and easily dug into with the most basic of tools. Archaeological features were generally easy to spot, either through an admixture of humic soil in the sand, or evidence of localised burning. However, in the case of the *in situ* hoards, this was not the case; in Hoard L, the intermediate band of clean sand and carefully laid stone between the upper and lower pits gave all the appearance of natural.

Equipment on site consisted of a broad range from the complex to the mundane. The magnetometer surveys were at first hand-held in the usual manner, but after the second (1991) season, as the project broadened into wider landscape investigation, Tony Pacitto developed his 'chariot' (**Fig. 5.4**). This was a hand-drawn cart with the magnetometer mounted on it, which triggered a reading every metre. Squares 20 x 20m were set out, and bamboo canes placed as sighting lines at alternate metre points to ensure good coverage of the field. The Elta 4 proved versatile in

Figure 5.2 Readings from the detectors were investigated through hand excavation. Left to right: Tony Pacitto, Charles Hodder, Ian Stead

Figure 5.3 Ian Stead hand excavating *in situ* torcs in the Hoard K pit

Figure 5.4 Tony Pacitto surveying in the hoard field with 'the chariot', a hand-drawn cart carrying the magnetometer. The turning of the wheels automatically triggered a reading to be taken every metre

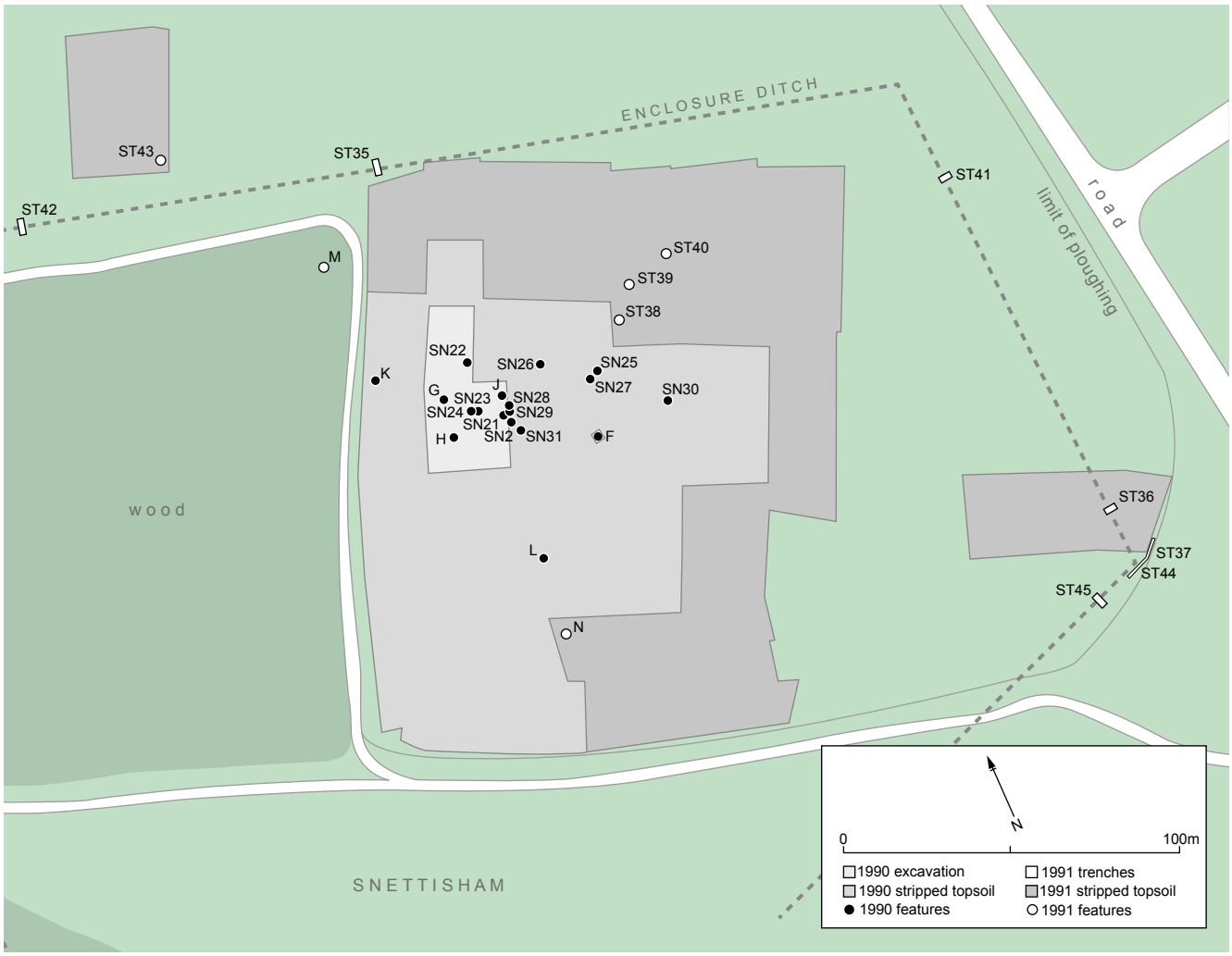


Figure 5.5 Plan showing locations of stripped areas and features investigated in 1990 and 1991

delivering accurate and speedy survey information, most of which could be plotted each tea break.

Excavation equipment varied from the bulldozer-drawn box scraper – which was key to enabling significant progress – to the usual hand-tools. Excavation of the hoards relied on a variety of hand equipment – plastic kitchen scoops proving particularly useful in removing soil but not damaging the metal. Paint and other brushes were not particularly helpful with the damp sand, tending to smear rather than remove. Metal detection relied on a variety of different equipment. The majority of the field survey relied on discriminating detectors with 20–40cm coils, and these were usually sufficient for identifying metal finds for recovery. A deep-seeking detector was also used for initial survey to check for the presence of deeper deposits. Over-ear headphones were essential, partly due to machining noise, but also helping against the cold. The hand-held devices were standard DIY-issue pipe and cable detectors, and particularly useful during the machining.

The 1990–1992 excavations

The 1990 season

As outlined above and in Chapters 1 and 2, in the 1990 excavation season large areas of the hoard field (Areas 1–15) were stripped using a box scraper and surveyed by metal detector. A number of Neolithic pits were revealed early on. Due to the challenges of excavating at the site, the limited time available, and the very real risk from illicit detectorists, a conscious effort was made to avoid disturbing further Neolithic material in order to focus on the Later Iron Age hoards.

Four kinds of features were excavated in 1990 (see **Fig. 5.5**): a series of Neolithic (Phase 1) pits (SN21, SN23, SN24, SN26, SN27, SN28, SN29, SN30); a pit (SN31) containing a very small amount of burnt bone which was radiocarbon dated to Phase 2 (**Table 5.3**); a slightly smaller pit containing a large quantity of Earlier Iron Age (Phase 2) pottery (SN25); and the Later Iron Age (Phase 3) metalwork hoard pits F, G, H, J, K and L. All of these features (except Hoard F, which was located and excavated by Charles Hodder, see Chs 2 and 4) were identified through topsoil clearance and metal-detecting in the main hoard field or the subsequent excavation carried out by hand across a smaller area. The archaeological features uncovered in this season of excavation are considered in more detail in the phase-by-phase discussions (Chs 6–8). Two (SN2 and SN22) were revealed to be natural and are not considered further. Note that not all SN numbers are included in the context listing since they were not originally applied exclusively to features. SN1–20 referred variously to stripped areas, hoard pits, pottery findspots etc. and for this reason were often duplications of other labelling systems.

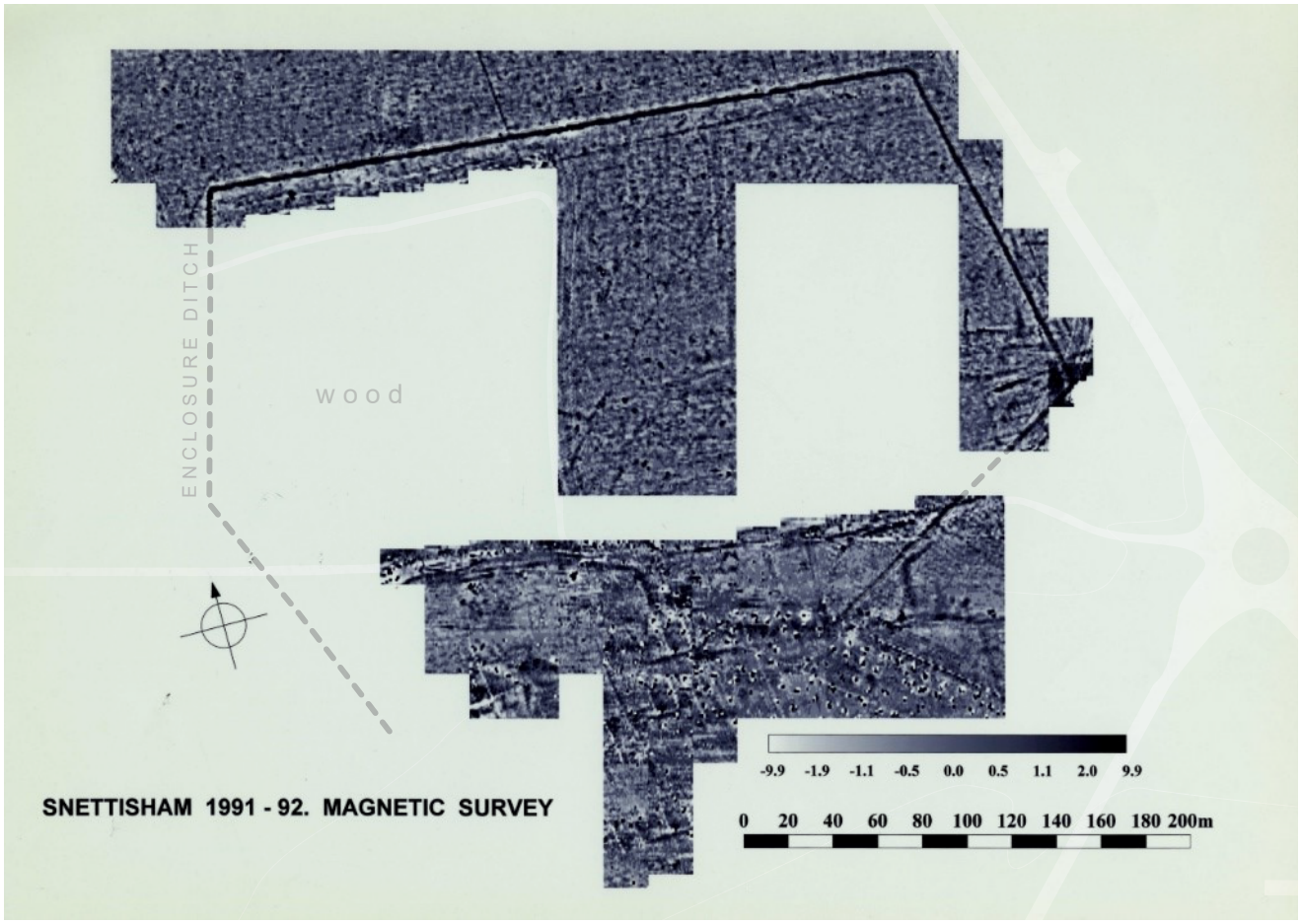


Figure 5.6 The results of gradiometer survey carried out during the BM 1991–2 excavation seasons, revealing the northern and eastern sides of the polygonal enclosure ditch

The 1991 season

Figure 5.5 shows the features and areas investigated in 1991. In March 1991, Charles Hodder had discovered Hoard M (a group of large amorphous lumps of silver-copper alloy, radiocarbon dated to Phase 4, see **Table 5.2**) in the north-east corner of the wood. One of the first tasks of the excavations in November 1991 was to investigate this findspot, but no further discoveries were made. As the find was made at the base of a pine tree, it was not possible to discern the limits or nature of any hoard pit, and indeed it is possible the finds had been re-deposited.

The area stripped of topsoil was extended in the main field to the south and east (Areas 16–19 and 22), leading to the discovery of Hoard N, a disturbed Iron Age coin hoard (Phase 3), in Area 18. The cleared areas were extended to the north (Areas 21 and 25–27), uncovering three flint concentrations and/or burnt areas likely associated with the same period of activity as the Neolithic pits (ST38, ST39, ST40, all in Area 25). An area to the north-west (Area 28, which had produced an Iron Age torc in 1973, S.18) was stripped but produced very few finds or features except a similar area of burning with a concentration of flint (ST43) that may likewise be associated with Neolithic activity. These features are considered further in the discussion of Phase 1 (Ch. 6).

The stripping of Area 21 also provided an opportunity to investigate a linear spread of furnace debris and slag, extending E–W for around 20m. This was in the vicinity of the area where Hoard P had earlier been stolen by illicit metal detectorists (see Chs 2, 4, 12 and 15). A gradiometer survey carried out in 1991 (see Ch. 2; **Fig. 5.6**) revealed that this was part of a large, polygonal enclosure ditch, almost completely surrounding the area which produced the hoards, though open to the south-west where the ground descends towards what would have been an inlet from the Wash.

Slots were dug through the northern part of the ditch in the area of the slag deposit (ST35), and to the east (ST36). A slit trench (ST37) was opened in an attempt to follow the path of the enclosure ditch to the south of ST36, but there was a very deep overburden in this area. Further slots were subsequently opened across the enclosure ditch to the north (ST42) and east (ST41). Another slot (ST44) was opened to the south of ST36 to investigate the path of the enclosure ditch, but found no features, despite excavation down to the natural carrstone. Slot ST45 was then dug to the west of ST36, revealing the turn of the enclosure ditch. The five 1991 slots (ST35, ST36, ST41, ST42 and ST45, see **Fig. 5.5**) are considered in the sections on Phases 4 and 5 (Ch. 9), alongside the enclosure ditch excavations from 1992.

The 1992 season

The 1992 season focused on providing a wider context for the hoards. A total of 21 trenches were opened over features identified by geophysical survey (see **Table 5.1** and **Fig. 5.7**). A trench-by-trench outline is given below, and a full list of contexts can be found in Appendix 1.

Trench	Description
SA1	Machine strip across enclosure ditch
SA2	Machine strip across enclosure ditch
SA3	Machine strip across modern field drain
SA4	Machine strip to check for enclosure ditch alignment (no features)
SA5	Machine strip across west side of enclosure ditch, including entranceway
SA6	Machine strip across enclosure ditch
SA7	Machine strip of area to south of main field
SA8	Hand-dug trench to check for enclosure ditch alignment (no features)
SA9	Hand-dug trench to check for enclosure ditch alignment (no features)
SA10	Hand-dug trench to check for enclosure ditch alignment (no features)
SA11	Hand-dug trench to check for enclosure ditch alignment (no features)
SA12	Machine strip to investigate ditch junction on gradiometer survey
SA13	Machine strip to investigate ditches to south of main field
SA14	Hand-dug trench to check for enclosure ditch alignment
SA15	Hand-dug trench at site where drinking horn terminals found (S.253–4), located over the main road, to east of main site
SA16	Machine strip extension of SA5 to investigate ditches to the east
SA17	Machine strip across enclosure ditch, east of SA6, to explore ditch junction
SA18	Machine strip across enclosure ditch and outer ditch to west
SA19	Machine strip to check for enclosure ditch alignment (no features)
SA20	Machine strip extension to east of SA7
SA21	Machine strip extension to east of SA7 and SA20

Table 5.1 Trenches opened in 1992

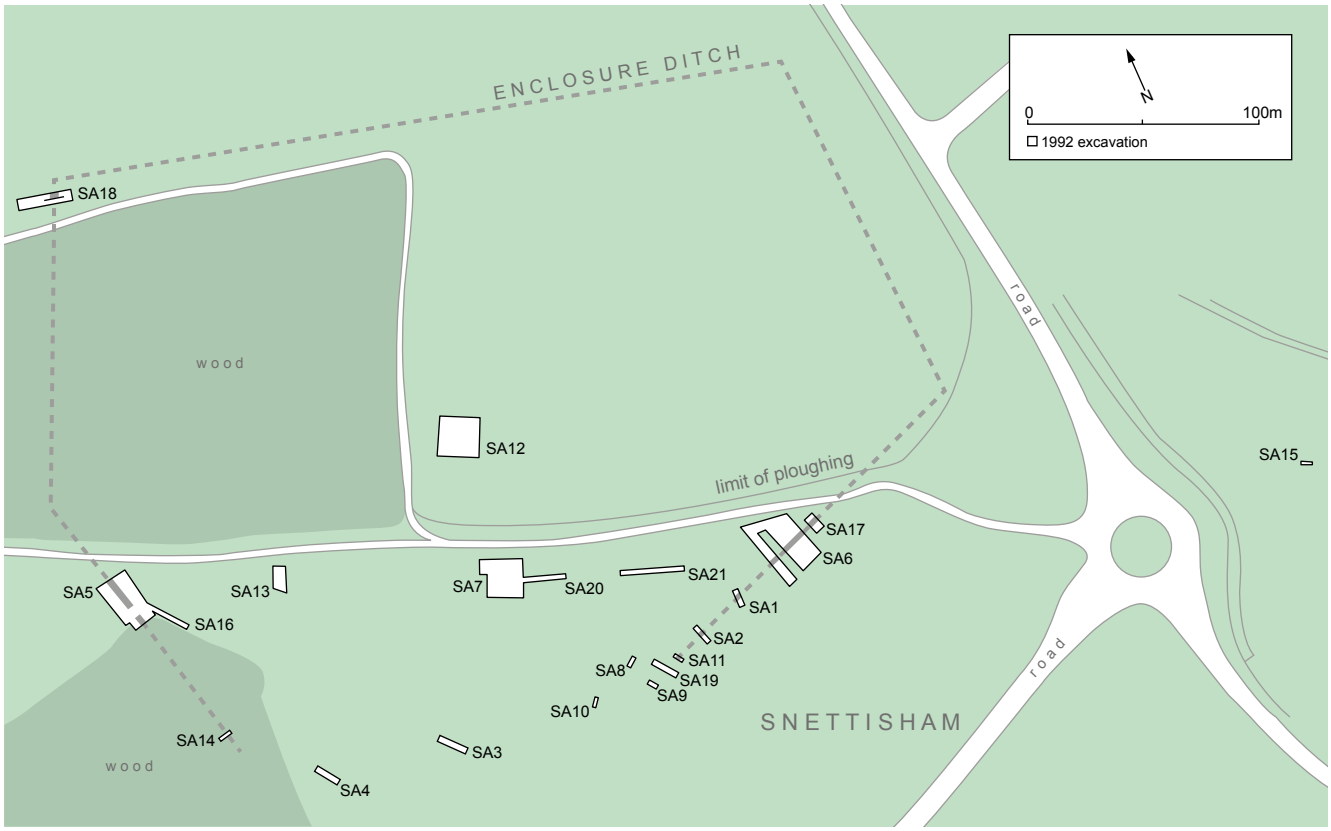


Figure 5.7 Plan showing locations of trenches excavated in 1992

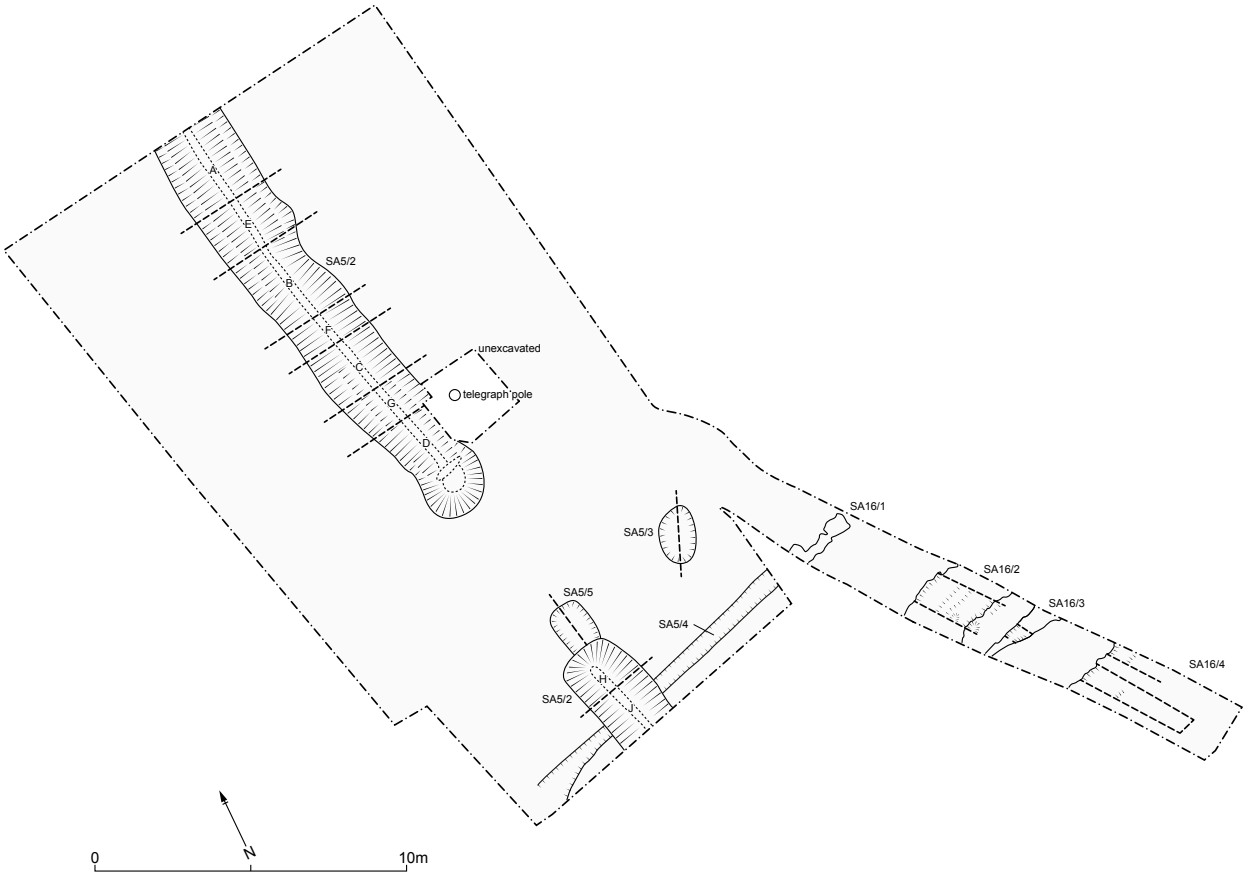


Figure 5.8 Plan of Trenches 5 and 16

SA1: machine strip across enclosure ditch
Trench 1 (2.5 x 7.5m, oriented approximately N–S), was opened up across the south-east side of the enclosure ditch, following the line from ST45 (excavated the previous year). Context SA1/1 was the plough soil, a uniform reddish sandy soil with gravel found across the trench. SA1/2, the enclosure ditch, is discussed in more detail in Chapter 9.

SA2: machine strip across enclosure ditch
Trench 2 (2.5 x 7.5m, oriented approximately N–S) was opened up to the south-west of Trench 1, following the line of the enclosure ditch. Context SA2/1 was the plough soil. SA2/2, the enclosure ditch, is discussed in more detail in Chapter 9.

SA3: machine strip across modern field drain
Trench 3 (2.5 x 15m, oriented approximately NW–SE) was opened up at the far south of the site, extrapolating a possible line of the enclosure ditch from Trenches 1 and 2. The same reddish-grey sandy topsoil with gravel and tree roots (SA3/1) was present. A ditch was uncovered (SA3/2), running approximately E–W across the trench, cut into hard, light yellowish-grey clayey soil. However, although on a similar alignment, this was not the enclosure ditch. At its base (*c.* 0.45m below the base of the topsoil) was a field drain of 18th or 19th-century origin.

SA4: machine strip to check for enclosure ditch alignment
Trench 4 (2.5 x 12m, oriented approximately NW–SE) was opened up to the west of Trench 3 in an attempt to locate the south-west edge of the enclosure ditch. However, no features could be discerned. The topsoil (SA4/1), about 0.3m in depth, lay directly over the yellowish-grey clayey sand covering the bottom of the trench. In the centre of Trench 4 this was overcut to a depth of 0.6m to confirm that it was natural.

SA5 and extension SA16: machine strip across west side of enclosure ditch, including entranceway
Trench 5 (24 x 14m, oriented approximately N–S) was opened up on the south-west side of the site to explore the section of the enclosure ditch which included an entrance or gateway, visible on the 1991 gradiometer survey. Features are shown in **Figure 5.8**. The same reddish-grey sandy subsoil (SA5/1) was present below the turf as in the other trenches to the east. The enclosure ditch (SA5/2) was clearly visible, with a sequence of four fills apparent in most of the excavated sections. This is discussed further in Chapter 9. The enclosure ditch was cut by a shallow linear ditch (SA5/4), which petered out to the west. This was most likely a vestigial trace associated with much more recent landscaping activity at the edge of the woodland or the track running along its perimeter.

Two shallow but apparently archaeological hollows were excavated (SA5/3 and SA5/5). Each was a shallow pit/depression filled with reddish sandy soil. There were no finds from SA5/5, and very few from SA5/3. These included both prehistoric and post-medieval pottery, as well as an iron knife fragment (S.353) from the very surface. Neither feature could be closely dated, though SA5/5 was cut by the enclosure ditch, so must pre-date this Phase 4 (Early Roman) feature. The inclusion of post-medieval pottery suggests that SA5/3 was later.

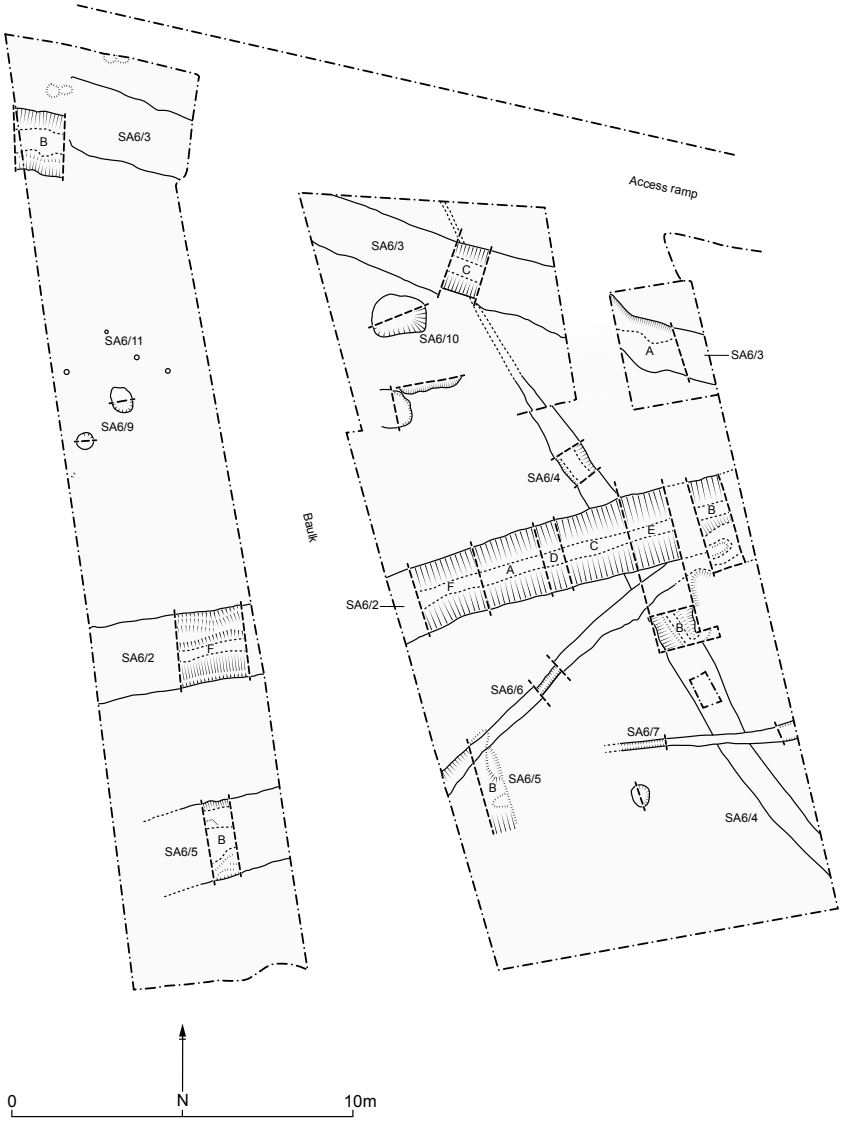


Figure 5.9 Plan of Trench 6

Trench 16 was a narrow slot measuring 2.5 x 25m, an extension of Trench 5 to the south-east to investigate ditches indicated by the gradiometer survey. Below the reddish sandy topsoil (SA16/1) three very shallow ditches (SA16/2, SA16/3, SA16/4) were cut on average 0.15m deep into the carrstone natural (0.25m), but with a deep overburden of up to 0.9m. They follow the curve of the contours, and may be part of later landscaping work. At least one, SA16/3, gave the appearance of a natural feature, and none produced any finds.

SA6 and extension SA17: machine strip across enclosure ditch

Trench 6 was opened up to explore the line of the enclosure ditch between Trench 1 and ST45. The original trench (10 x 25m, oriented N–S) was expanded by digging a parallel trench (5 x 25m) around 5m to the west and extending both up to the modern road. Features are shown in **Figure 5.9** (NB: SA6/8 was re-coded on site as SA6/3B). Beneath the plough soil (SA6/1), the enclosure ditch (SA6/2) was clearly visible, with a similar profile to that seen in Trenches 1, 2 and 5.

The enclosure ditch cut two natural features: SA6/4 and SA6/6. SA6/4 was a linear feature running N–S. The upper fill of reddish earth could be confused with an archaeological ditch, but below that was a deep, narrow crack filled with sand. It produced no finds and was certainly natural, a periglacial wedge. SA6/6 was another deep periglacial crevice cut by the enclosure ditch, with a light-coloured sandy fill. A number of other natural features were also uncovered: SA6/7, SA6/5 and SA6/10. SA6/7 was a similar narrow, U-shaped feature running straight across the trench E–W and ending abruptly. It was devoid of finds except for a copper alloy pin fragment (S.246) near the surface, which could be Romano-British, or part of a much later buckle. Like SA6/4, the deep filling of sand below the reddish upper fill showed that it was natural rather than archaeological. SA6/5 was an irregular hollow, broad and shallow with a flat base, cut no more than 0.2m into the carrstone. There were no significant finds, and it is likely that this feature was also natural. Small, shallow pit SA6/10 produced flints from the lower part of the feature but was otherwise lacking any finds. It could be closely dated and may be natural.

SA6/9 was a post hole which was found to contain modern nails and charcoal, suggesting a modern origin. The four small possible post holes SA6/11 were devoid of

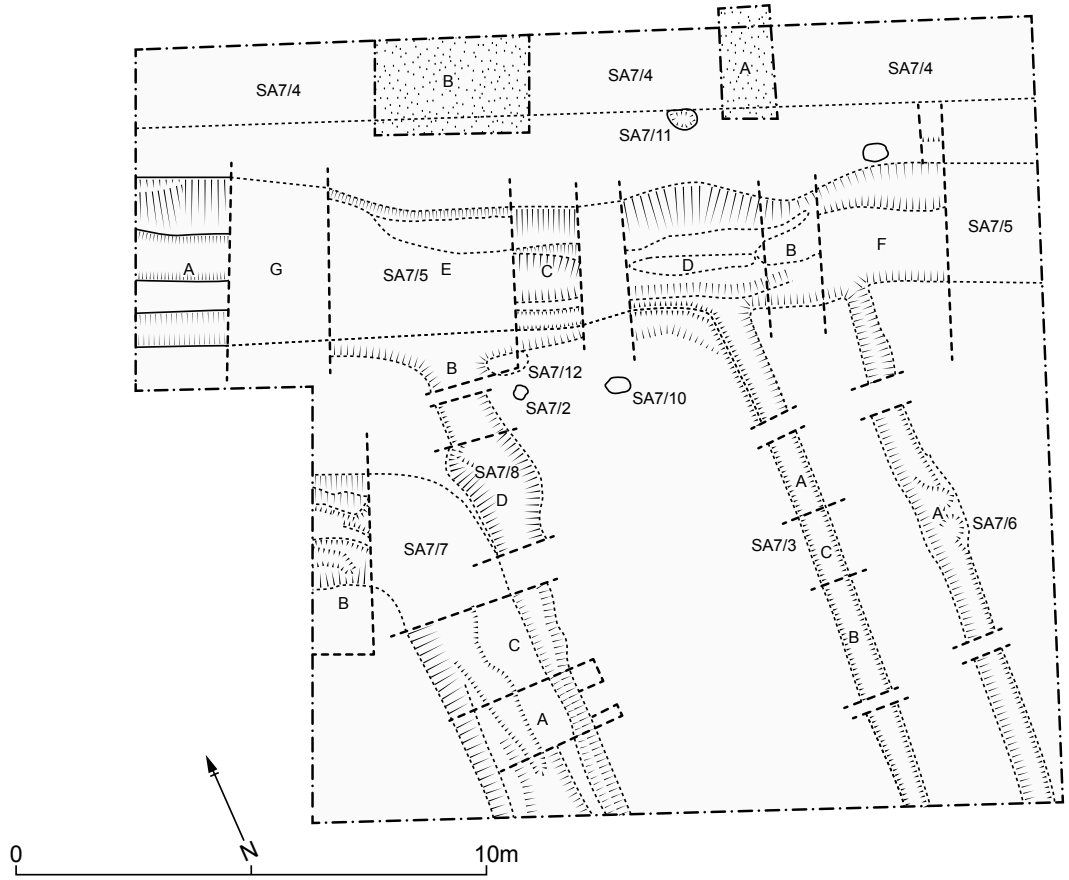


Figure 5.10 Plan of Trench 7

finds and may also be modern, including the possibility that they are animal burrows rather than human-made features.

SA6/3 was a very shallow ditch, almost without finds. A series of episodes of re-cutting (A, B and C) were evident, all following the same line. Trench 17, a machine strip 5 x 10m, oriented N–S, was opened up to the east of Trench 6 to investigate the relationship of ditch SA6/3 to the enclosure ditch, SA6/2. Below the topsoil (SA17/1), the enclosure ditch (SA17/2) was revealed, as well as the extension of ditch SA6/3 (SA17/3). A sondage trench was put in along the west end of the feature to help define stratigraphy, before taking the junction down in plan. The east section clearly showed a line of carrstone, demonstrating that ditch SA17/3 cut the enclosure ditch (SA17/2) (see **Fig. 9.5b**). Although in Trench 6 ditch SA6/3 produced residual Late Bronze Age and Earlier Iron Age pottery, the stratigraphy in Trench 17 clearly shows it to be post-Roman (and perhaps much more recent).

SA7 and eastern extensions SA20 and SA21: machine strip of area to south of main field

Trench 7 was a NE–SW machine strip, approximately 15 x 18m, opened up south of the modern road, close to the south-east corner of the wood adjoining the hoard field. Features are shown in **Figure 5.10** (NB: SA7/9 was re-coded, and SA7/13 was an extension of SA7/5). Below the reddish sandy topsoil directly below grass level (SA7/1) were a number of small pits, some of which produced Late Bronze Age and Earlier Iron Age pottery (SA7/2, SA7/10, SA7/11 and SA7/12). It is likely that some of these represent a distinct period of activity at the site (Phase 2), discussed in Chapter 7.

Two large ditches ran E–W across the north of Trench 7: SA7/4 and SA7/5 (which showed evidence for multiple phases of re-cutting). Whilst these E–W ditches produced prehistoric and Romano-British pottery, this was likely residual. SA7/4 and SA7/5 may be part of the same sequence of recent (Phase 6) E–W ditches seen to the east in Trenches 6 and 7 (SA6/3, SA17/3). SA17/3 cut the enclosure ditch, supporting the idea that these are later features. SA7/4 to the north ran parallel with the modern metalled road surface, and appeared to be traces of a pre-modern track, subsequently levelled up to form a raised base for the modern drive.

A number of the features in Trench 7 (SA7/3, SA7/6, SA7/7 and SA7/8) were shallow N–S gullies which joined SA7/5 at its southern edge. Each had a single fill of silty sand with inclusions of small stones. These features had been substantially disturbed by animal burrowing; ditch SA7/7 produced infant rabbit bones, most likely representing *in situ* deaths of this burrowing species (see Ch. 10).

It was not possible to ascertain the stratigraphic relationship between the E–W ditches (SA7/4, SA7/5) and N–S gullies (SA7/3, SA7/6, SA7/7, SA7/8). None of the N–S gullies could be dated, and it is likely they are natural, perhaps periglacial.

Trenches 20 and 21 were machine strip extensions (2.5 x 20m and 2.5 x 30m respectively) eastward from the centre of Trench 7 to locate any other N–S ditches comparable to those seen in Trench 7. No features were detected in Trench 20. In Trench 21, three ditches (SA21/2, SA21/3, SA21/4) were located at the east end of the trench, all running

parallel N–S. These ditches were devoid of any finds and so could not be dated. Again, it is possible that they were of natural origin.

SA8: hand-dug trench to check for enclosure ditch alignment

Trench 8 was a hand-dug strip 3.2 x 1m, running broadly NE–SW, pursuing a possible turn of the enclosure ditch postulated from the geophysical survey. Context SA8/1 was ascribed to the build-up of sandy soil under the poplar wood to the south to a depth of approximately 0.75m before a sandy clay natural. The only feature located (SA8/2) was a narrow, shallow ditch running E–W, which produced no finds, most likely a fairly recent attempt at drainage (see also SA11/3, which may be a continuation of this drainage ditch to the east in Trench 11). To check that the natural had been reached below SA8/2, the trench was overcut at the base into grey clay, at one point revealing some surviving carrstone over the clay, presumably a remnant of natural, geological stratification (the same was seen in Trenches 10 and 11).

SA9: hand-dug trench to check for enclosure ditch alignment

Trench 9 was another hand-dug slot, 3.3 x 1.8m and running broadly NW–SE. It was opened across the projected line of the enclosure ditch, located in Trenches 1 and 2. Context code SA9/1 was assigned to the build-up of sandy soil in the poplar wood, ranging from 0.7m deep at the north side to 0.1m at the south side above the carrstone level. There was much evidence of rabbit activity in this hill wash. No features were located within the trench. It seemed likely that the enclosure ditch must end further north-east, and to this end Trench 11 was opened between Trench 2 and Trench 9 to look for the ditch terminus (see below).

SA10: hand-dug trench to check for enclosure ditch alignment

Trench 10, running broadly NE–SW and 2.7 x 0.9m, was opened in an attempt to locate the southern side of the enclosure ditch. Context SA10/1 was assigned to a build-up of sandy soil in the poplar wood, approximately 0.8m deep. By a depth of 1m there was no trace of the enclosure ditch, only an increasingly clayey natural. At the very north end of the trench, a small number of pieces of carrstone were found running E–W at a depth of 0.8m below the surface. They may form another modern drainage element or perhaps be natural periglacial features (see Trench 8 and 11).

SA11: hand-dug trench to check for enclosure ditch alignment

Trench 11 (1 x 5m, oriented NW–SE) was opened between Trench 2 and Trench 9 to look for the continuation, or possibly the terminus, of the enclosure ditch. SA11/1 was ascribed to the sandy topsoil. The natural took the form of weathered carrstone, with grey clay below. At a depth of about 1.3m, the lines of two ditches were visible. The main enclosure ditch (SA11/2) was cut by another (SA11/3) with a much stonier filling. SA11/3, running E–W, was on line with ditch SA8/2, and likely also related to recent drainage activity. The enclosure ditch was excavated to a depth of 1.4m, but the base was not reached.

SA12: machine strip to investigate ditch junction on gradiometer survey

Trench 12 was a square machine strip running NE–SW, measuring 20 x 20m. It was opened over Areas 11–12, where a number of Iron Age coins had been found in 1990 (Ch. 15, Cat. nos 223, 238, 246–50, 252–3, 273, 283), and to investigate a possible ditch junction seen on the gradiometer survey. Features are shown in **Figure 5.11**. Context SA12/1 was assigned to the topsoil. After scraping down to the natural surface, the outlines of two irregular, curving gullies (SA12/2 and SA12/3) were visible. Both of these were interpreted as natural features in 1992. However, Later geophysical survey (carried out in 2006–9, see below) revealed a series of enclosures across the hoard field, most likely part of a field system. Ditches associated with this series of enclosures should have been present in Trench 12, but were not observed during excavation. It is possible that these ditches are represented by SA12/2 and SA12/3 but that the nature of the re-deposited carrstone fills made it difficult to differentiate features from the natural. The geophysical survey also suggests that the field system may only have been revealed at substantial depth. Thus, an alternative explanation is that the challenging nature of the carrstone geology meant that the excavation did not go deep enough to encounter the ditches revealed by the later survey.

Feature SA12/6 was a possible hearth (see Ch. 7). The other features from the trench (SA12/4, SA12/5 and SA12/7 to SA12/28) were a series of small holes 0.13–0.27m in diameter, many of which produced Late Bronze Age to Earlier Iron Age pottery, as well as some flint (sherds: SA/JO, SA/JP, SA/KF, SA/KG, SA/KH, SA/KK, SA/KL, SA/KM, SA/KN, SA/KO; flints: SA/KG*, SA/KJ*, SA/KL, SA/KM*, SA/KN*, SA/KO*). These were tentatively recorded in the site notebooks as post holes, but are interpreted here as animal burrows; no certain ancient post hole was found at the site (Ian Stead pers. comm.). Other small circular features were planned (see **Fig. 5.11**), but not assigned numbers. No finds are recorded from these un-numbered features and it is likely that they too were animal burrows or natural hollows.

Despite the heavy burrowing disturbance, the relatively large quantities of pottery recovered suggest that this was an area of prehistoric activity pre-dating the Later Iron Age hoards immediately to the north. This is discussed in more detail in Chapter 7.

SA13: machine strip to investigate ditches to south of main field

Trench 13 (5 x 11m, oriented NE–SW), was opened to the south of the modern road, between Trench 5 and Trench 7 to investigate ditches curving south from the line of the drive, but hit a major recent disturbance to the north with a very sharp vertical edge. North of that was clear sand on top of carrstone. The disturbance was likely to be recent carrstone quarrying which here and to the west had created a ridge south of the track that branches off to the south of the drive. The track continues south-west, more or less through to the

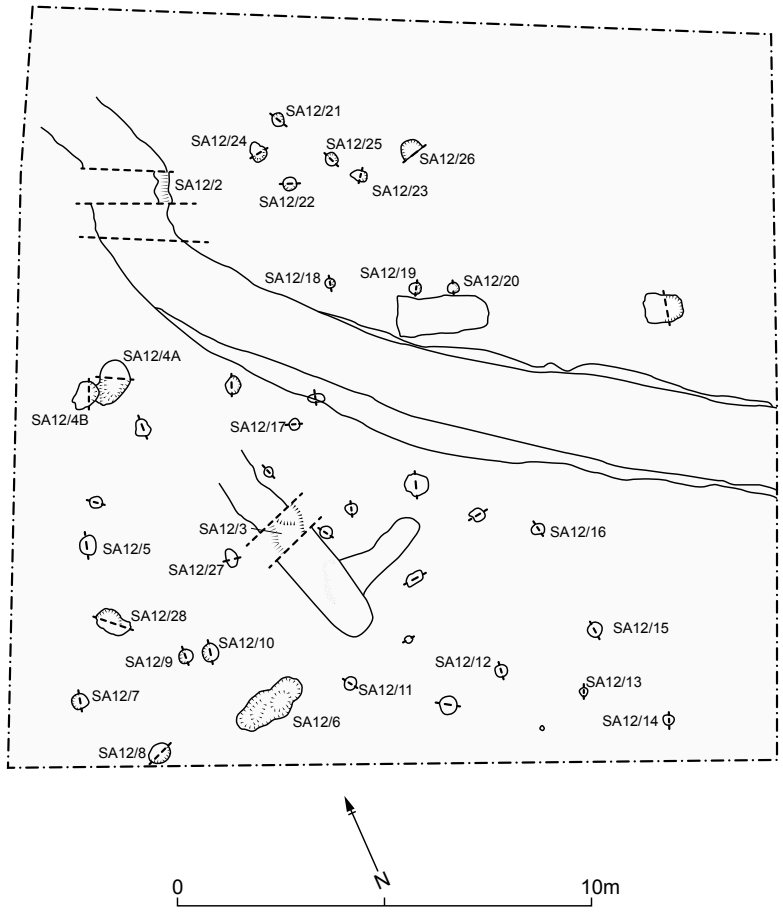


Figure 5.11 Plan of Trench 12

entrance of the enclosure (in Trench 5) and beyond that the track is bordered on its south side by two slight banks and ditches, possibly defining different parts of the wood.

SA14: hand-dug trench to check for enclosure ditch alignment
Trench 14 (1 x 6m, oriented E–W) was opened up to the south of Trench 5 along the projected line of the enclosure ditch on the south side of the entranceway. A ditch on this line (SA14/2) was revealed, which may be part of the enclosure ditch but did not have the distinctive V-shaped profile seen elsewhere. There was extensive evidence of rabbit disturbance.

SA15: hand-dug trench at site where drinking horn terminals found, located over the main road, to east of 'gold field'
Trench 15 (oriented NW–SE, 5 x 1.5m) was opened substantially to the east of the main site to explore the area where Charles Hodder had discovered two drinking horn terminals (S.253–4) in 1989. A substantial amount of post-medieval tile and building debris (SA15/2) was uncovered below the topsoil (SA15/1), concentrated at the west end, where it was around 0.6m deep. Below this there was natural carrstone at both ends of the trench from 0.6–0.7m below the surface. In the central part of the trench was a tree bowl with sandy fill (SA15/3) to a depth of around 1.8m, below which the natural carrstone began. No ancient features were observed.

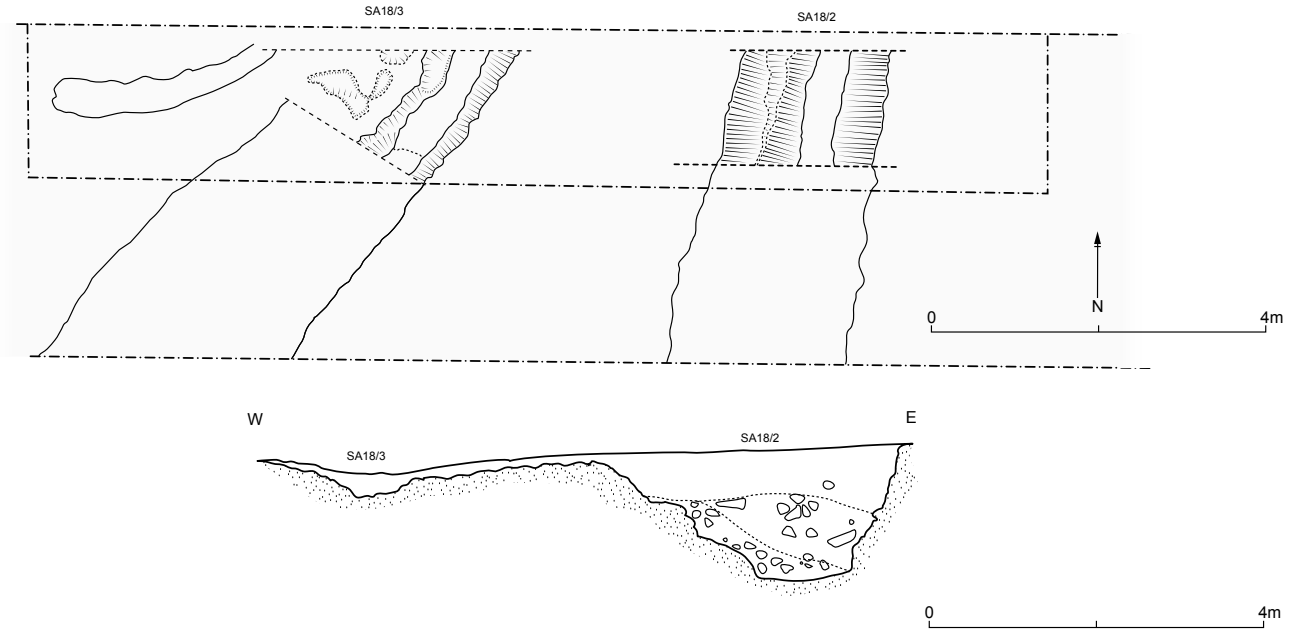
For SA16 see SA5

For SA17 see SA6

SA18: machine strip across enclosure ditch and outer ditch to west
Trench 18 (oriented E–W, 5 x 20m) was opened across the north-west corner of the enclosure ditch to investigate a small ditch just outside the enclosure, to the west. Features are shown in **Figures 5.12–13**. The enclosure ditch in this section (SA18/2) ran roughly N–S, and was similar in profile to elsewhere but with a broader base. The second ditch (SA18/3) was approximately 1m in width, running SW–NE. It was shallow and devoid of any finds and so could not be dated.

SA19: machine strip to check for enclosure ditch alignment
Trench 19 (2.5 x 12m, oriented N–S) was opened up between Trench 9 and Trench 11 in an attempt to find the terminus of the enclosure ditch (which was seen in Trench 11 but not present in Trench 9). Context SA19/1 was given to the topsoil. There was a fairly level natural outcrop of carrstone boulders (with one very large boulder removed) at a depth of 1.0–1.1m below the hill wash. No features were located. This suggests that the terminus of the enclosure ditch lay under a poplar tree just to the north, between Trenches 19 and 11.

For SA20 and SA21 see SA7



Figures 5.12–5.13 Plan of Trench 18 (above); section through ditch SA18/2 and SA18/3 (below)

Soil phosphate survey, 1991

Mike Cowell

In support of other physical survey techniques being used on the site during Ian Stead's 1990–1 excavations, a soil phosphate survey was carried out. Enriched levels of phosphate in soils are a characteristic feature of human occupation and the aim of the survey was to seek evidence for any settlement that had been established at or nearby the location of the hoards. Initially, samples were taken only over the 'gold field', as this was the first to be excavated and stripped, but the survey was subsequently extended into parts of the adjacent woodland.

Sampling and analysis

The soil coverage at Snettisham is relatively shallow and consists of about 50cm of sandy topsoil that overlays and grades into a ferruginous, cemented sand layer called carrstone. Since any evidence of enriched phosphate will lie within the topsoil, and the field has been ploughed, it was considered advisable to sample at two depths, at about 10cm and 40cm, in case there had been some disturbance of the stratigraphy or leaching of phosphate. A sampling grid was laid out at 10m intervals based on the site reference point (5000E/5000N) and covered, in extent, approximately 150m in the N–S direction and 230m in the E–W direction. This included most of the open field where many of the hoards were found and extended into part of the woodland to the west. Owing to the location of trees, it was not possible to sample at exactly 10m intervals in the woodland and some points had to be omitted due to such obstructions. Sampling was carried out rapidly using a Dutch auger that was turned to the appropriate, and approximate, depth and the soil sample extracted from near the point of the auger. Samples of about 20–30cm of soil were collected from each location, and depth, and stored in self-sealed plastic bags.

The soil samples were analysed in the Department of Scientific Research at the BM using a standard colorimetric procedure (molybdenum blue method) that has been applied to other soil surveys, including Grimes Graves (Craddock *et al.* 1985; Hughes *et al.* 2012). Briefly, this involved taking a sub-sample of 1g of each soil, adding 10ml of hydrochloric acid (2 molar) and heating these on a water bath to near boiling point for about 1 hour to release the phosphate. After cooling, an aliquot of 0.5ml was taken from each of the sample solutions, transferred to 20 or 25ml flasks and diluted colorimetric reagent was added. Standard solutions with known amounts of phosphate were treated in the same way. The intensity of the blue colour that developed, which is proportional to the concentration of phosphate in the solution, was then measured in a colorimetric cell in the wavelength range 700–900nm. The results are reported in parts per 100,000 of phosphorus (pp10^5 of P or mg of P per 100g of soil). The analytical errors, precision and accuracy, are expected to be in the range ±15–25%.

Results and discussion

A preliminary examination of the data showed phosphate concentrations in the range about 50–600 pp10^5, with the highest values very localised. Where the concentrations are high, whatever the sampling depth, the samples collected at the deeper location (about 40cm) had much higher concentrations. For this reason, and as a greater coverage of analyses was available for this depth, the discussion of results is confined to the data obtained for the 40cm samples. The relevant phosphate concentrations are tabulated in **Figure 5.14**, which shows the value at each grid point sampled. In addition, a contour chart has been prepared (**Fig. 5.15**) from the grid data which has been overlaid to show the relationship to the wooded area and hoard findspots.

As can be seen from **Figures 5.14–15**, much of the open field area has soil phosphate concentrations in the range 30–100 pp10^5. Although the 'natural' level of phosphate varies between different soil types so that a single figure for 'background' cannot be quoted, the range up to 100 pp10^5 seems to be typical. Such values are similar to the background levels observed from surveys at the Neolithic

Northing \ Easting	4900	4910	4920	4930	4940	4950	4960	4970	4980	4990	5000	5010	5020	5030	5040	5050	5060	5070	5080	5090	5100	5110	5120	5130
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5090						40	40	55	65	50	85	65	70	45	60	75	50	50	70	40	30			
5080						50	70	50	45	40	80	70	75	65	70	65	40	65	70	30	30			
5070						50	212	130				60	50	45	70	75	99	80	70	60	30			
5060					83	272	181	213	233	243	60	110	80	115	80	99	85	75	75	75	70			
5050			269	240	299	335	238	359	254	30	100	90	85	90	90	80	90	60	65	45	60			
5040			156	232	261	384	272	429	299	275	95	105	105	105	75	75	70	70	60	100	70			
5030			218	203	335	465	429	632	264	32	105	105	80	60	70	80	55	75	65	70	70			
5020			45	50	125	295	585	435	145	115	100	110		90	80	65	50	65	70	40	65			
5010			60	70	80	280	375	525	420	150	90	55	50	80	80	85	70	70	75	65	35			
5000					65	160	635	445	345	130	75	50	70	55	50	50	50		35	20	20			
4990					60	45	340	355	365	265	45	65	50	55	45	60	65	55	50	40	30			
4980					166	217	344	351	339	286	75	70	50	55	55	55	40	50	45	40	45			
4970					37	40	90	175	95	57	80	80	80	85	80	60	55	55	50	40	40			
4960								95	105	90	95	85	85	70	75	65	65	65	50	50	65			
4950					35	68	149	97	82	40	100	90	85	90	90	80	90	60	65	45	60			
4940					40	113	57	46	79	65	60	110	80	115	80	100	85	75	75	75	70			
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Figure 5.14 Soil phosphate concentrations (parts per 100,000) of samples taken at 40cm depth (© Mike Cowell)

flint mines at Grimes Graves (see above). Samples with 100–200 pp10[5] may be an indication of slight evidence of human occupation. From the contours in **Figure 5.15** it can be seen that there are some areas to the west of the open field with values in that range and also a few isolated points elsewhere. Most of the values within that range in the open field are probably due to spread from the much higher values within the wood. It should also be noted, from **Figure 5.14**, that many of those in the range 100–200 pp10[5] are only just over 100 pp10[5].

The area with the highest phosphate levels is in the wood just west of the hoard field, where levels as high as 600 pp10[5] have been found. Several lines of evidence indicate that this phosphate is associated with human occupation. First, the soil cover is visually much darker than either the soils further west in the wood, where the phosphate levels are much lower, or in the open field. Sherds of Romano-British pottery were found in the soil in this part of the wood (Ch. 9); some were found at 4960E/5010N during the soil sampling, together with fragments of bone. The high phosphate area

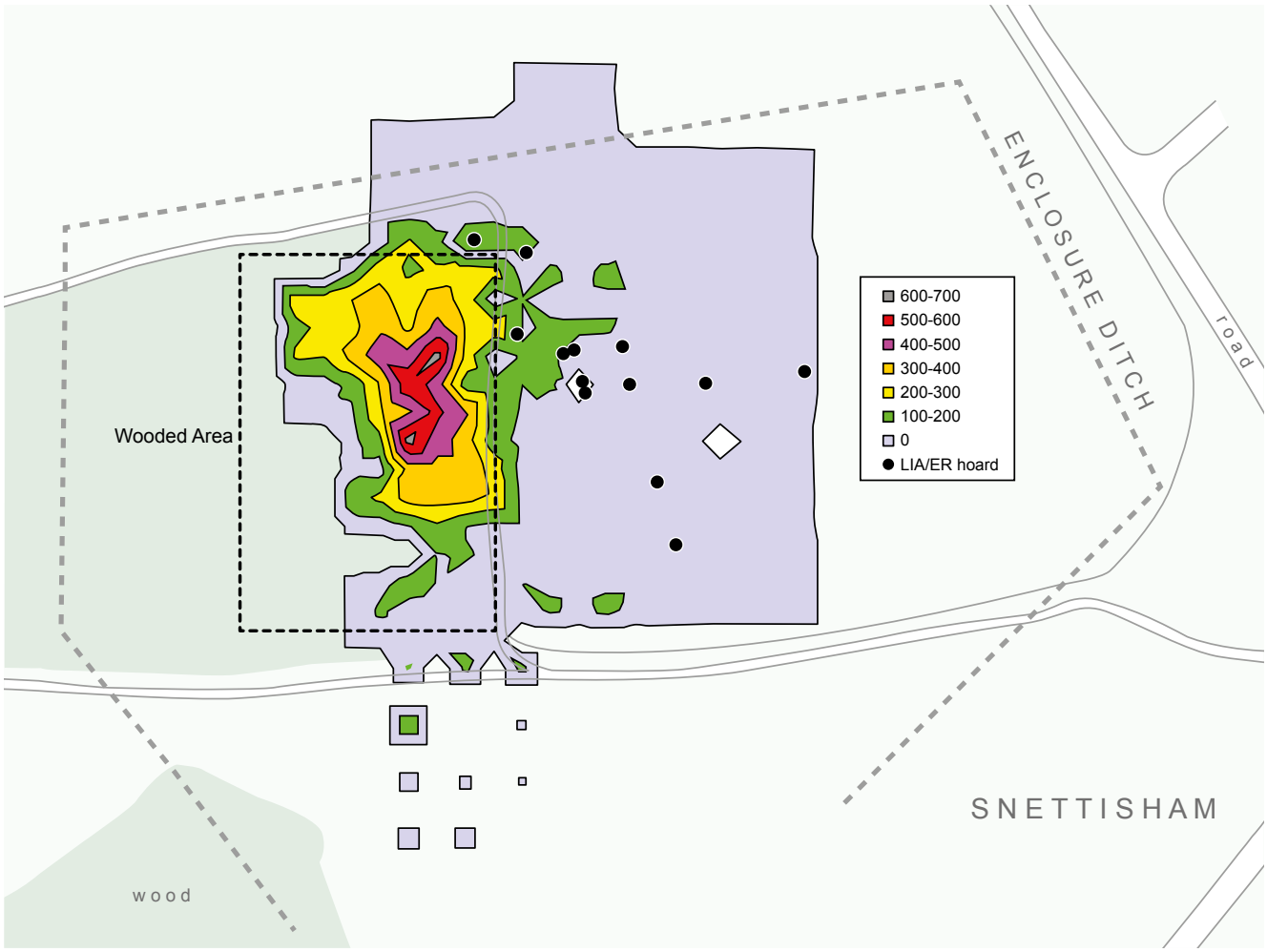


Figure 5.15 Contour chart of soil phosphate distribution, values in parts per 100,000 taken at 40cm depth

also has a dense nettle cover, often indicative of rich, disturbed soils, that thins out in other areas of the woodland. Although there seem to be two foci for the highest levels of phosphate, at about 4970E/5030N and 4960E/5000N about 30m apart, this may not necessarily reflect two separate areas of occupation as the level in the zone between them is within the measurement errors of the peak levels. The overall extent of intensive occupation within the sampled area seems to be about 80m N–S and 50m E–W, i.e. an area of approximately 4,000m².

From the phosphate alone, it is not possible to determine the date of this occupation; this can only be determined by excavation and the establishment of a datable context. The association with Romano-British pottery suggests that it may date to that period (Ch. 9), although the wooded area also produced the densest concentration of Phase 2 (Late Bronze Age to Earlier Iron Age) metalwork finds, and thus it is also possible that this higher phosphate concentration relates to Phase 2 midden-generating activity (Ch. 7).

Conclusions

The phosphate survey found no evidence for human occupation in the 'gold field'. But, there are very high levels of phosphate in the adjacent woodland, indicating an area of intensive occupation over about 4,000m². Association with Romano-British pottery suggests that it may date from this period, although an earlier or later date is also possible.

Geophysical survey, 2006–2009

Michael de Bootman

In late October 2006, the writer undertook a fluxgate gradiometer survey of the Ken Hill 'gold field'. A ground penetrating radar survey was later carried out by Ralph Potter, University of East London, in June 2009, with the data processing being undertaken by Dr Tim Dennis, University of Essex. The locations of the two survey areas are shown in **Figure 5.16**.

Methodology

Fluxgate gradiometer

A grid of forty 30 x 30m data squares, including partials, covering 3.5 hectares was established using standard survey practice and referenced to known points within the landscape. A Bartington 601 dual fluxgate gradiometer was used, and data was collected in a zig-zag format from each square along 2m transects with readings recorded every 0.25m.

Ground penetrating radar

A grid of three 20 x 60m data squares covering 0.54 hectares was established, and geo-referenced with differential GPS (Global Positioning System), with the co-ordinates being post-processed. A Mala X3M tow-system with a shielded 500MHz antenna and a data-recording 150mm distance

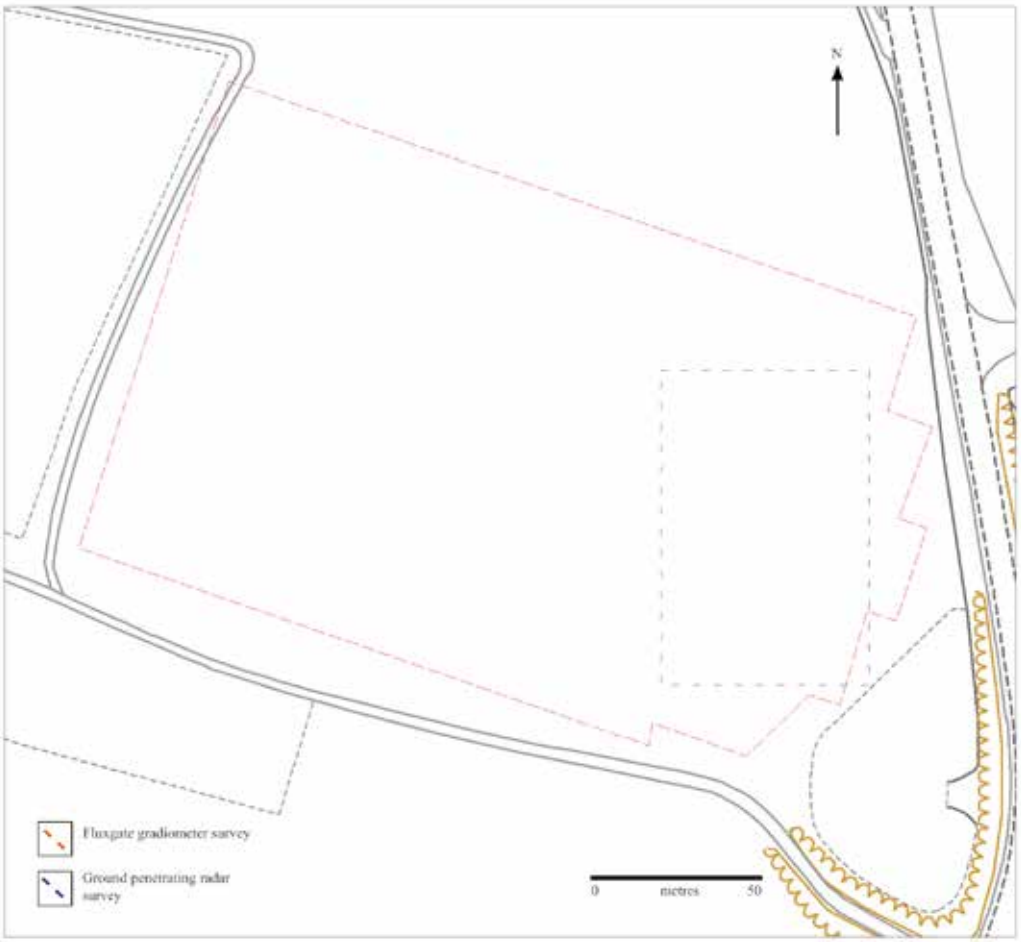


Figure 5.16 Location of fluxgate gradiometer (2006) and ground penetrating radar (2009) surveys

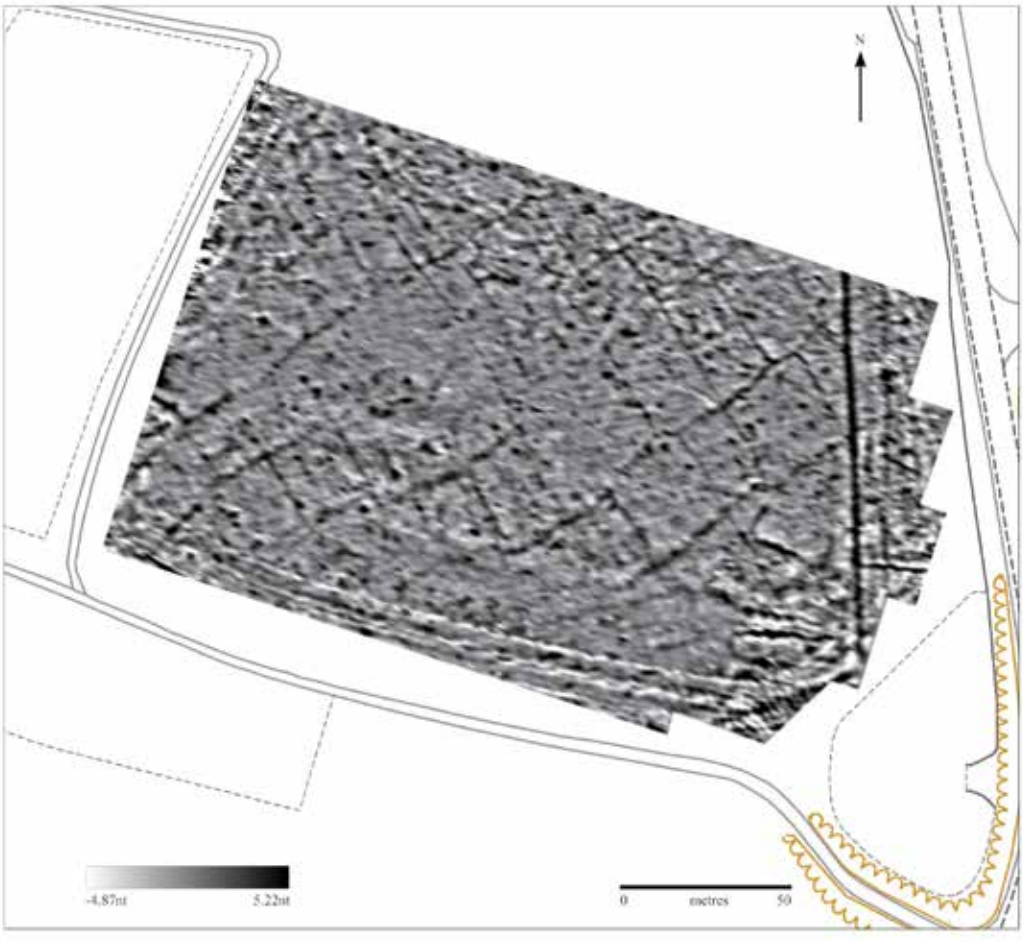


Figure 5.17 Fluxgate gradiometer survey – processed results

wheel was used. The data was collected in a zig-zag format along 0.5m transects, with readings being recorded every 0.05m. Averaging was achieved by 'stacking' four readings at each measurement point with a depth setting of 3.00m.

Processing

Rectification, mapping and interpretation of the processed data were undertaken using mapinfo 10.

Fluxgate gradiometer (**Fig. 5.16**)

The data, initially processed in 2006, has been re-processed using the latest Geoscan Geoplot software version 4. Numerous processing steps were required on the raw data that included:

- Despike which removed random/spurious 'iron spikes'
- Clip to limit the data to specified maximum and minimum values
- Destagger to correct displacement of anomalies caused by alternate zig-zag traverses
- Zero-mean traverse to set the background mean of each traverse within the data square to zero and remove the effect of striping
- Low-pass filter to remove high frequency, small-scale spatial details and enhance large weaker features
- Interpolate to increase the data points in the survey to create a smoother appearance.

Ground penetrating radar (GPR) (**Fig. 5.19a–d**)

The data processing was undertaken by Dr Tim Dennis using bespoke-written software. All data from the survey block were loaded into what amounts to a three-dimensional array, with processing (filtering) operations available in space (XY) and time (T) dimensions. Stages used on the Snettisham datasets were:

- Along-track mean level subtraction at each time sample value
- Adaptive Gain Equalisation – this calculates the RMS (root mean square) value of the signal on each depth/timeslice. The resulting profile is smoothed with a Gaussian filter and used to normalise the RMS value on all depth/timeslices to a constant value. This is an effective way to accommodate the wide dynamic signal range GPR systems produce, from the large-amplitude signals at near-zero delay due to direct transmit-receiver antenna coupling to the smallest components at maximum time delay
- Rectification – the raw signals are bidirectional but structures are clearer if the signal magnitude is used instead. Here zero amplitude is rendered as black, with white used for maximum (after clipping)
- Spatial Filter – a small level of Gaussian low-pass filtering is applied in the along-track direction on depth/timeslice images for further noise reduction before scaling to equal resolution in both spatial dimensions. The result is 400 sequential 0.75m depth/timeslices in a .png format. The sub-blocks were then laid out into a composite as individual frames. The sequence can then be converted and viewed as a video animation.

Interpretation

The fluxgate gradiometer survey produced responses that included negative and positive linears, and positive areas/points. Linears that are entirely positive in polarity normally relate to infilled cut features whose fillings are magnetically enhanced in comparison with surrounding matrices. Such features may be ancient ditches, former field boundaries or the results of ploughing activity. Some may even be of natural origin. Similarly, positive areas or points may indicate either pits of an archaeological nature, or naturally occurring depressions in the ground.

There are a few linear responses in the dataset that are completely negative in polarity. These are probably evidence of ploughing activities where a slight bank of soil has built up, producing a lower magnetic magnitude relative to the background topsoil.

Three groups or types of positive features were identified in the fluxgate gradiometer survey (**Fig. 5.18**). These include numerous small positive areas/points, and two sets of positive linears. **Figure 8.2a–b** shows these in relation to the hoard findspots and other excavated features.

One set of positive linears (**Fig. 5.18** – positive linear 1) criss-crossed the majority of the survey area, representing a network of SE/NW by NE/SW rectilinear ditched enclosures. The other group of positive linears were located on the eastern side of the field (**Fig. 5.18** – positive linear 2). The strongest responses (**Fig. 5.17**) clearly represent the east side and south-east corner of the polygonal enclosure identified in the BM excavations. Other similar linears running parallel and at right angles in close proximity may be contemporary.

The ground penetrating radar survey was sited parallel to the enclosure ditch at a location where the fluxgate gradiometer survey indicated it bisected the criss-crossing positive linears, in order to investigate the relationship between these features.

The accompanying data confirmed the results from the fluxgate gradiometer survey, showing the enclosure ditch (**Fig. 5.19d**: low amplitude reflection 2), and the criss-crossing ditches (**Fig. 5.19d**: low amplitude reflection 1). The ditches show as black, indicating absence of signal reflection; elsewhere the signals are unstructured and noise-like. The likely explanation for this is that the 'natural' background soil structure is gravel-like, possibly containing many larger stones. In the ditches the backfill is more uniform with few reflection centres, for example alluvium. Only three of the 400 depth slices are illustrated. **Figure 5.19a** shows the depth at approximately 1.50m, where both the criss-crossing features and the enclosure ditch are present, similarly **Figure 5.19b** illustrates the same at 1.80m, while **Figure 5.19c** at 2.20m shows the criss-crossing features, but does not contain the enclosure ditch. Given the relative depths of these features, the most likely scenario is that the enclosure ditch post-dates the much deeper field system ditches.

Conclusion

The results from Snettisham show a network of rectilinear ditched enclosures, represented by a series of positive linears criss-crossing the majority of the survey area (**Fig. 5.18** –

Figure 5.18 Fluxgate gradiometer survey – interpretation of processed results

positive linear 1) and also present in the ground penetrating radar data (**Fig. 5.19d** – low amplitude reflection 1).

Work by the Norfolk Air Photographic Interpretation team has interpreted extensive cropmarks to the north in the area of Heacham and south around Ingoldisthorpe and Dersingham as rectilinear field systems dating to the Iron Age or Roman period (see **Fig. 3.7**; Massey *et al.* 2003, 339–41; Brennand 2004; Albone *et al.* 2007, 91–3). The criss-crossing features identified in both geophysical surveys at Ken Hill are characteristically very similar to these cropmarks, and probably form part of the same landscape.

The polygonal enclosure ditch identified during the BM excavations is also evident in both geophysical survey datasets (**Fig. 5.18** – positive linear 1, **Fig. 5.19d** – low amplitude reflection 2). The ground penetrating radar depth slice at 2.20m (**Fig. 5.19c**) shows the criss-crossing features but not the enclosure ditch, indicating that the enclosure ditch is most likely a later feature.

The numerous positive areas/points are a little more enigmatic to interpret. They may be either archaeological or natural.

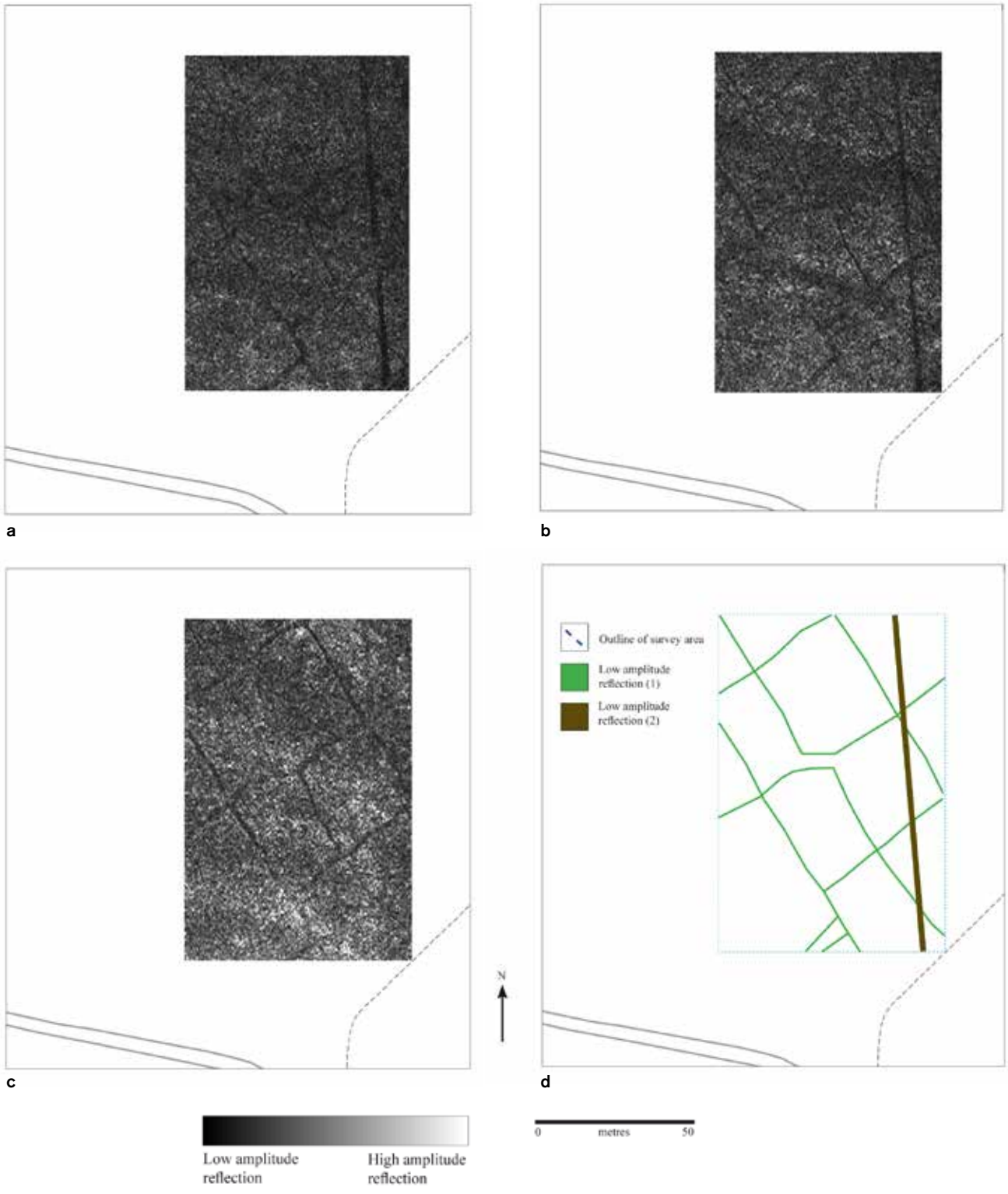


Figure 5.19a–d Ground penetrating radar – processed results and interpretation: a) Ground penetrating radar – processed depth slice 1.50m; b) Ground penetrating radar – processed depth slice 1.80m; c) Ground penetrating radar – processed depth slice 2.20m; d) Ground penetrating radar – consolidated interpretation between 1.50–2.20m (© Michael de Bootman)

Radiocarbon dating programme results

Julia Farley and Sophia Adams

Two programmes of radiocarbon dating have been carried out on the material from the BM excavations at Snettisham. Organic remains from the hoards, including charred wood cores from torcs, were sampled as part of the University of Oxford 'Technologies of Enchantment' project (**Table 5.2**; Garrow *et al*. 2009), which sought to create an improved framework for the absolute dating of Celtic art objects. There was very little organic material from the hoard pits, and so this aspect of the sampling programme was limited. Note that the dates given below vary slightly from those given in the 2009 volume, since an updated calibration curve has been used. A second programme of radiocarbon dating was undertaken by the BM as part of the preparation of this report (**Table 5.3**). This focused on stratified material from the 1991–2 excavations, in particular the enclosure ditch.

Object	CADB code	Sample description	Est. age of wood	Lab. no.	δ13C	Radiocarbon measurement BP	Calibrated date (95% confidence) IntCal20	Calibrated date (68% confidence) IntCal20
F.168	CA33	Field maple wood charcoal inside torc	<10 yrs	OxA-18219	-26.56	2181 ± 29	370–120 cal BC	350–170 cal BC
L.6*	CA46	Lime wood fibre string bound around torc	<5 yrs	OxA-18222	-27.43	2175 ± 31	360–110 cal BC	350–170 cal BC
L.6*	CA35	Lime wood fibre string bound around torc	<5 yrs	OxA-18220	-28.22	2500 ± 31	780–510 cal BC	770–550 cal BC
M.1–M.5	CA47	Alder wood charcoal embedded within silver-copper alloy lumps from hoard	old	OxA-18223	-26.12	1931 ± 29	20–210 cal AD	30–130 cal AD

* Two samples were apparently taken from this repair to L.6: one from the torc itself, which had been heavily conserved, and another from a separate, untreated fragment. It is likely that the unexpectedly ancient date (780–510 cal BC) was affected by the conservation treatment, rendering it unreliable.

Failed samples:

F.167	CA32	Hazel wood charcoal inside torc	<10 yrs	OxA	N/A	N/A	N/A	N/A
G.16*	CA34	Lime wood fibre string bound around torc	<5 yrs	OxA-18164	N/A	N/A	N/A	N/A

*Published as G.17 in Garrow *et al*. 2009

Table 5.2 Radiocarbon measurements and calibrated date ranges from the dating programme carried out as part of the University of Oxford 'Technologies of Enchantment' project (Garrow *et al*. 2009), which produced the Celtic Art Database (CADB). Measured at the Oxford Radiocarbon Accelerator Unit; dates were originally calibrated with reference to the IntCal09 calibration curve (Reimer *et al.* 2009) using the OxCal calibration program v.4.1.5 (Bronk Ramsey 2009). Dates have been recalibrated using the internationally agreed terrestrial calibration curve IntCal20 (Reimer *et al*. 2020) and the OxCal calibration program c.4.4.4 (Bronk Ramsey 2021). Results are rounded out to 10 years

Sample type	Species	Site code	Context	Lab. no.	δ13C	Radiocarbon measurement BP	Calibrated date (95% confidence) IntCal20	Calibrated date (68% confidence) IntCal20
Cremated bone	Mammal (species unknown)	SN/FE	SN31, pit	SUERC-89720 (GU53518)	-21.2	2868 ± 26	1130–930 cal BC	1110–1000 cal BC
Charcoal	*Carpinus betulus*, hornbeam (<10 yrs old)	ST/DY	ST35, enclosure ditch, Layer 1	SUERC-89717 (GU53515)	-24.3	1653 ± 26	260–540 cal AD	370–530 cal AD
Animal bone	Large mammal (species unknown)	ST/DY	ST35, enclosure ditch, Layer 1	SUERC-89721 (GU53519)	-22.0	1656 ± 28	260–540 cal AD	360–440 cal AD
Charcoal	*Salix* sp., willow (<10 yrs old)	ST/EZ	ST35, enclosure ditch, Layer 2	SUERC-89718 (GU53516)	-25.5	1669 ± 26	250–530 cal AD	360–420 cal AD
Animal bone	Large mammal (?Bos, ?tibia)	ST/EZ	ST35, enclosure ditch, Layer 2	SUERC-89722 (GU53520)	-22.0	1777 ± 28	210–360 cal AD	240–330 cal AD
Charcoal	*Salix* sp., willow; *Corylus avellana*, hazel (<10 yrs old)	ST/HL	ST42, enclosure ditch, Layer 2	SUERC-89719 (GU53517)	-25.6	1702 ± 26	250–420 cal AD	260–410 cal AD
Animal bone	*Bos taurus*	SA/AK	SA5/2, enclosure ditch, Layer 2	SUERC-89723 (GU53522)	-21.9	1693 ± 26	250–420 cal AD	260–410 cal AD
Animal bone	*Bos taurus*	SA/CO	SA6/2, enclosure ditch, Layer 2	SUERC-89727 (GU53524)	-21.4	1811 ± 28	130–340 cal AD	210–320 cal AD
Animal bone	*Bos taurus*	SA/BT	SA6/2, enclosure ditch, Layer 3	SUERC-89728 (GU53525)	-21.1	1769 ± 28	220–370 cal AD	240–330 cal AD
Animal bone	*Bos taurus*	SA/AW	SA6/3, ditch	SUERC-89729 (GU53526)	-21.9	355 ± 27	1450–1640 cal AD	1470–1630 cal AD
Animal bone	Mammal (species unknown)	SA/GO	SA7/5, ditch	SUERC-89730 (GU53527)	-23.1	412 ± 26	1430–1620 cal AD	1440–1480 cal AD

Failed samples:

Sample type	Species	Site code	Context	Lab. no.
Animal bone	Mammal (species unknown)	ST/GC	ST42, enclosure ditch, Layer 1	GU53521
Animal bone	?*Bos taurus*	SA/AV	SA5/2, enclosure ditch, Layer 3	GU53523

Table 5.3 Radiocarbon measurements and calibrated date ranges from the BM excavations dating programme. Measured at the Scottish Universities Environmental Research Centre (SUERC). Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar *et al.* (2016). Dates were calibrated with reference to the IntCal13 calibration curve (Reimer *et al.* 2013) using the OxCal calibration program v.4.3.2 (Bronk Ramsey 2009). Dates have been recalibrated using the internationally agreed terrestrial calibration curve IntCal20 (Reimer *at al.* 2020) and the OxCal calibration program c.4.4.4 (Bronk Ramsey 2021). Results are rounded out to 10 years

Chapter 6
Phase 1: Early Neolithic (*c.* 3650–3400 BC)

Julia Farley and Jody Joy, with contributions by Sarah Percival and Peter Makey

The earliest evidence from excavations at the site dates to the Early Neolithic period, comprising a cluster of pits containing Neolithic pottery, and various scatters of worked flint, as well as stray finds of other stone objects, primarily a small number of polished stone axes.

This chapter presents the evidence from excavation, and specialist reports on the Neolithic pottery, flint, and other stone objects. There were no organic finds from Neolithic features, and thus it was not possible to carry out radiocarbon dating. The dating suggested for this phase (*c.* 3650–3400 BC) is based on comparison of the ceramics from the pit cluster at Snettisham with a better-dated assemblage from Kilverstone, Norfolk.

Early Neolithic features

Figures 6.1–2 and **Table 6.1** detail the Phase 1 features at the site. Eight pits were revealed which contained Early Neolithic pottery and stone artefacts. Seven were in Areas 1 to 3 (the immediate vicinity of the hoards), and one, SN30, is an outlier slightly to the east. The other features are shallow areas of burning or flint concentrations in Areas 25 and 28.

The distribution shown in **Figure 6.1** includes all Phase 1 features observed during the excavations, but it is most likely incomplete as the excavators attempted to leave Neolithic material undisturbed where possible (see Ch. 2). After several pits (SN21, SN23, SN24, SN28, SN29) were uncovered in the central area subjected to excavation by hand in 1990 (within Areas 1 and 2, **Fig. 5.5**) it was decided to avoid stripping to this depth with the box scraper. The other Neolithic pits from that season were found when shovel-scraping (SN27) or when the box scraper went deeper than intended (SN26 and SN30).

Features dated to Phase 1

NB: Descriptions of pit fills were not recorded, nor was large-scale flotation of soil samples carried out, although small soil samples from some pits were retained.

SN21: Shallow circular pit (its edge cut by one of Rainbird Clarke's trenches), 1.00 by 0.95m, no more than 0.1m deep below the stripped surface (**Fig. 6.2**). Neolithic sherds: SN/FQ, SN/RK; flints SN/MK* (NB: Not all flint from the site was retained, and those objects marked with * had not been located at the time of publication), SN/RK.

SN23: Shallow circular pit, 1.0 by 0.9m, 0.18m deep (**Fig. 6.2**). Neolithic sherds: SN/RL; flints: SN/ML*, SN/RL.

SN24: Shallow circular pit, 1.05m diameter, 0.2m deep; only 0.25m from SN23 (**Fig. 6.2**). Neolithic sherds: SN/RM, SN/MM; flints: SN/MM, SN/RM.

SN26: Pit, 0.9 by 0.6m, 0.2m deep, with many cobbles (some broken) and several sherds (**Figs 6.2–3**). Neolithic sherds: SN/QJ; cobble samples: SN/QO.

SN27: Circular pit, 0.7m diameter, 0.12m deep (**Fig. 6.2**). Neolithic sherds: SN/QP.

SN28: Pit, 1.2 by 1m, 0.15m deep (**Fig. 6.2**). Neolithic sherds: SN/OD, SN/RG; flints: SN/OD, SN/RG.

SN29: Pit, 1.2 by 1m, 0.2m deep (**Fig. 6.2**). Neolithic sherds: SN/NP, SN/RJ; flints: SN/NP, SN/RJ.

SN30: Shallow pit, 0.7 by 0.5m, 0.18m deep (**Fig. 6.2**). Neolithic sherds: SN/MV, SN/NA; flints: SN/MV, SN/NA; Neolithic polished stone axe: SN/NB*.

Ex. year	Area	Feature	Type
1990	Area 2	SN21	Pit
1990	Area 1	SN23	Pit
1990	Area 1	SN24	Pit
1990	Area 3	SN26	Pit
1990	Area 3	SN27	Pit
1990	Area 2	SN28	Pit
1990	Area 2	SN29	Pit
1990	Area 7	SN30	Pit
1991	Area 25	ST38	Burnt area and flint concentration
1991	Area 25	ST39	Flint concentration
1991	Area 25	ST40	Burnt area and flint concentration
1991	Area 28	ST43	Burnt area and flint concentration

Table 6.1 Phase 1 features

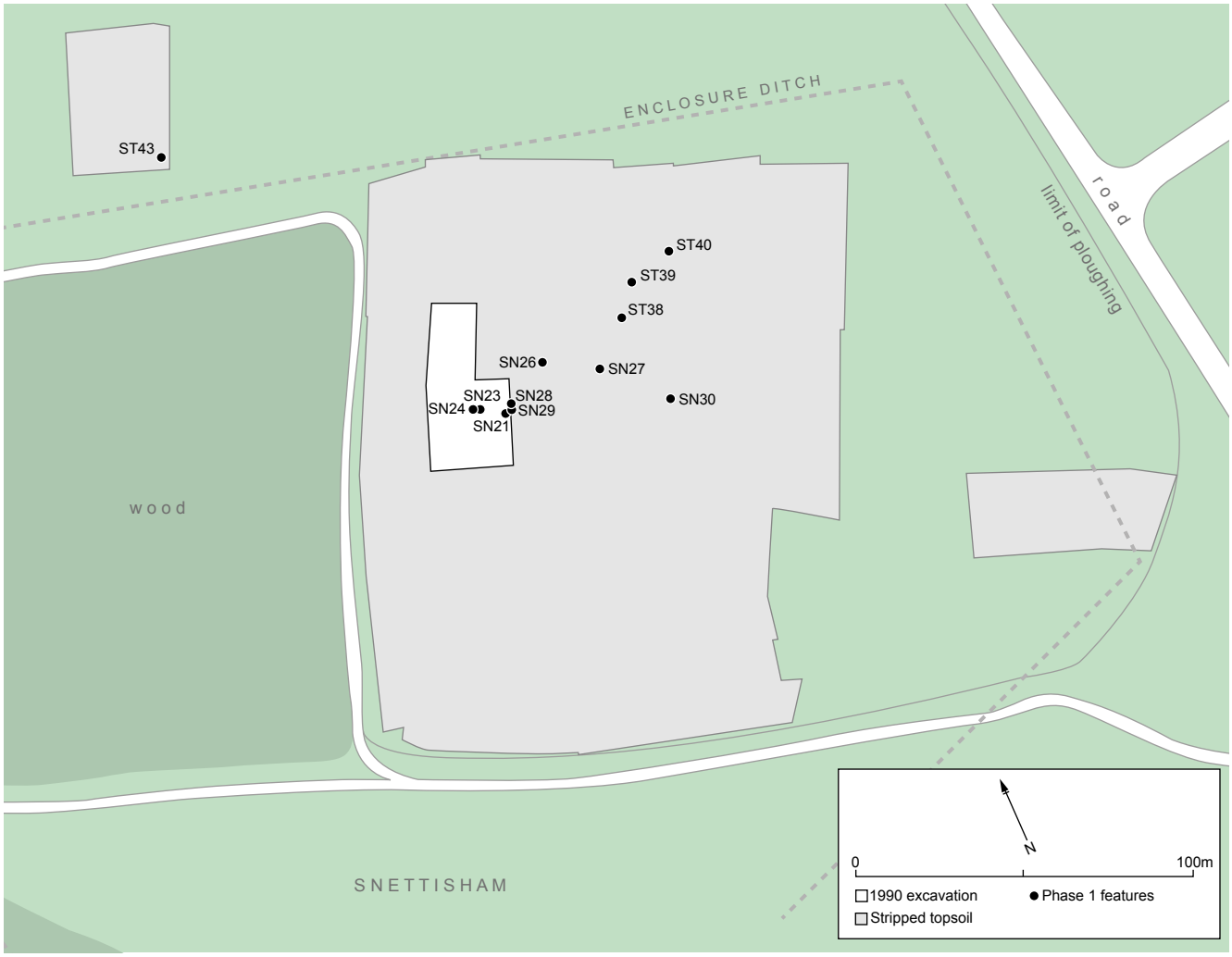


Figure 6.1 Plan showing locations of Phase 1 features

ST38: Circular burnt area, 1.3m in diameter, no more than 2–3cm deep, with flint concentration within and around it. Flints: ST/EP, ST/EQ (from feature), and ST/EO (immediately to the west of burnt area).

ST39: Flint concentration. Flints: ST/ER. Described by Peter Makey (below) as resembling 'the fill of a small ploughed-out pit or post hole'. He suggests that the flints may represent 'the remains of a knapping event from which material had been removed for use'.

ST40: Burnt area, 0.25m in diameter, 0.14m deep, and flint concentration. Flints: ST/ES. Peter Makey (below) suggests that the flint concentration represents 'a spread of material that was being intentionally crushed to provide flint temper for prehistoric pottery production'.

ST43: Burnt area, 0.25m in diameter, 0.08m deep, and flint concentration. Flints: ST/HT.

In addition to these Phase 1 features, Neolithic flint tools and flakes (see below) also appeared as residual finds in later

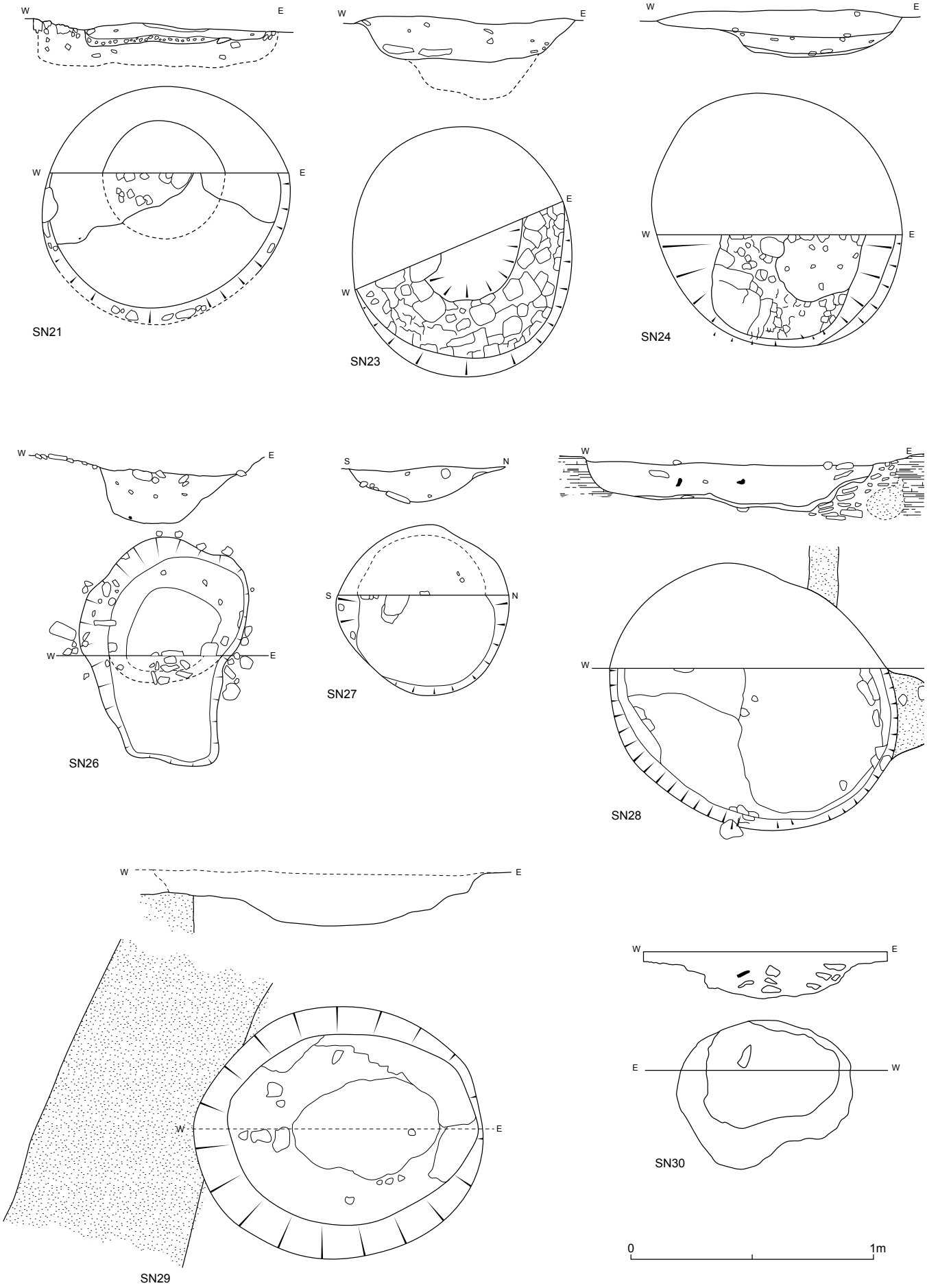


Figure 6.2 Phase 1 feature plans and sections (SN21, SN23, SN24, SN26, SN27, SN28, SN29, SN30)

features, including Hoard pits F, H and L (Phase 3) and the enclosure ditch (Phases 4–5). A complete Neolithic polished stone axe ST/GR , and fragment ST/ET were recovered from the topsoil of Area 21 in 1991. Another axe fragment SA/CZ was a residual find in modern ditch SA7/5 (see below).

Early Neolithic pottery

Sarah Percival

A total of 3,061 sherds of prehistoric pottery weighing 16,197g were collected from the British Museum excavations at Ken Hill, Snettisham. The assemblage includes a mix of Early Neolithic, Later Neolithic to Early Bronze Age and Post Deverel-Rimbury pottery recovered from pits, enclosure and other ditches and from cleaning around the areas surrounding the hoards. The pottery is poorly preserved with a mean sherd weight of 5g, with most sherds being small and abraded.

This section presents the Phase 1 material (earlier Neolithic), whilst Chapter 7 presents the Phase 2 material (Bronze Age to Earlier Iron Age pottery, as well as a handful of later Neolithic sherds) and Chapter 8 presents the small quantity of Phase 3 material (Late Iron Age pottery).

Methodology

The assemblage was analysed in accordance with the guidelines for analysis and publication recommended by the Prehistoric Ceramic Research Group (PCRG 2010). The total assemblage was studied and a full catalogue prepared (in archive, held by the British Museum). The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types. Vessel form was recorded and the sherds were counted and weighed to the nearest whole gram. Decoration, condition, food residues and sooting were also noted.

Earlier Neolithic pottery

The earlier Neolithic assemblage comprises 426 sherds weighing 2,307g, a little over half of which was recovered from pits excavated during the 1990 season (SN21, SN23, SN24, SN26, SN27, SN28, SN29 and SN30). The remainder was collected during cleaning of the stripped surfaces mostly from areas investigated in 1990 with smaller quantities recovered in 1991 and 1992 (**Table 6.2**).

The earlier Neolithic pottery is predominantly flint tempered, with fabrics containing flint forming 94% of the total assemblage by weight. The fine to coarse flint-tempered fabrics match those identified locally at Spong Hill and tend to form a continuum rather than falling into distinct fabric types (Healy 1988, 64). The remainder of the sherds are sandy or occasionally vacuous with sparse sub-angular voids perhaps representing lost chalk inclusions. Flint fabrics are widely used throughout the earlier Neolithic in East Anglia and form the major component of contemporary local assemblages from Spong Hill, Broome Heath and Kilverstone (Longworth 1960, 228; Wainwright 1972; Garrow *et al.* 2006, 29).

The assemblage includes rims from 22 vessels in a range of open and bag-shaped, round-based bowl forms. The vessels have shallow-moulded shoulder ledges with externally thickened, flattened, folded or rolled rims. A little less than 40% of the sherds have smoothed surfaces and less than 1% are burnished. The majority of the vessels are undecorated. Two have incised or channelled decoration forming a herringbone motif comparable to Mildenhall Ware vessels found at Kilverstone (Garrow *et al.* 2006, fig. 2.30, P121, P128) and Spong Hill (Healy 1988, fig. 71, P136). One bowl has slashes along the rim top, a decorative trait again found within Mildenhall Ware assemblages such as Spong Hill and Kilverstone (Healy 1988, fig. 67, P85; Garrow *et al.* 2006).

A little over half of the Neolithic pottery came from a cluster of seven pits in Areas 1 to 3 (SN21, SN23, SN24, SN26, SN27, SN28 and SN29, all in the area of the metalwork hoards) and isolated outlier pit or hollow SN30 (to the east, in Area 7). There may well have been other Neolithic pits in the area, but after the first few were discovered, a conscious effort was made to avoid disturbing more, since the main focus of the 1990 excavations was the Later Iron Age metalwork hoards. The pit assemblages have a small mean sherd weight of a little over 5g and contained 35 burnt or heavily burnt sherds alongside fresh and un-burnt pieces. The high degree of fragmentation and lack of complete or semi-complete profiles for the numerous vessels represented suggest that individual pots were already broken up, mixed and dispersed before deposition. The presence of burnt and fresh sherds is also consistent with the infilling of the pits with domestic debris from pre-pit or midden material (Healy 2013, 23; Garrow 2006). The small size of the sherds prohibited extensive re-fitting; however, conjoining sherds were noted between SN21 and SN28 suggesting that these pits in the cluster had been filled with material from the same source.

The Neolithic bowl is similar to the assemblages found at Kilverstone (Garrow *et al.* 2006, fig. 2.28) and Spong Hill (Healy 1988) being a mix of undecorated bowl and Mildenhall Ware. Plain and Mildenhall-style bowl are frequently found together in pit assemblages (Healy 1988; Garrow *et al.* 2006; Longworth 1960) and the pit cluster and isolated pit found during the 1990s excavations form a further example of pit deposition of curated occupation debris.

The remainder of the sherds were recovered from the cleaning of stripped surfaces. This context of recovery is more unusual as, as Healy notes, Early Neolithic bowl was absent from subsoil layers at Spong Hill and is rare in similar deposits elsewhere in the region (Healy 2013, 13). It is possible that these sherds were displaced from natural features or tree bowls comparable to midden deposits excavated at Colney where a large assemblage of pot and flint survived in the base of a natural hollow (Whitmore 2004).

Plain Bowl and Mildenhall Ware were current during the same broad period beginning in southern England between 3855–3730 cal BC (68% probability) and ending *c.* 3355–3210 cal BC (68% probability: Whittle *et al.* 2011, 762). The pit clusters at Kilverstone, which produced extremely similar vessels, were radiocarbon dated to 3650–3400 cal BC (Garrow *et al.* 2006, fig. 2.49) and a similar date range is suggested here.

Feature phase	Ex. year	Area	Feature	Feature type	Find code	Quantity	Weight (g)
1	1990	Area 1	SN23	Pit	SN/RL	17	55
			SN24	Pit	SN/MM	4	15
					SN/RM	3	5
		Area 2	SN21	Pit	SN/FQ	31	221
					SN/RK	3	6
			SN26	Pit	SN/QJ	23	57
			SN27	Pit	SN/QP	19	45
			SN28	Pit	SN/OD	6	31
					SN/RG	46	364
			SN29	Pit	SN/NP	4	17
					SN/RJ	50	124
		Area 7	SN30	Pit	SN/MV	6	22
					SN/NA	30	352
Unphased	1990	Area 1	Topsoil/subsoil SN/JB SN/KC		SN/BJ	29	95
					14	14	
					3	4	
		Area 2	Topsoil/subsoil SN/RN		SN/OC	3	14
					16	94	
		Area 4	Topsoil/subsoil SN/KU SN/ND		SN/KR	2	64
					9	27	
					1	9	
		Area 7	Topsoil/subsoil		SN/MS	3	14
	1991	Area 16	Topsoil/subsoil ST/AT		ST/AG	8	32
					86	583	
	1992	Trench 5	SA5/1	Topsoil/subsoil	SA/AC	10	43
Total						**426**	**2,307**

Table 6.2 Quantity and weight of Early Neolithic pottery by feature

Neolithic flint

Peter Makey

The flint totals 4,891 pieces plus an estimated 13,000 small spalls (these being predominately flakes less than 2mm in maximum length) from feature ST40 (burnt area and flint concentration in Area 25).

The assemblage contains remarkably few retouched pieces but a large proportion of cores. Plough damage is evident on a very large proportion of the pieces; many have also been burnt both during prehistory and more recently. Nearly all the pieces have been knapped by the application of hard hammerstones, many of which are present in the assemblage. There is a small degree of bipolar percussion evident in the fieldwalked material. There does not appear to be a great deal of correlation between the debitage and the suite of retouched implements. Intriguingly, the distribution of cores does not always correlate with increased abundance of flint debitage.

The four-letter codes used here (e.g. ST/FC) generally refer to mixed groups of material recovered from the same area (see Ch. 1 for full explanation of these codes). In this chapter, the flint is first summarised by artefact type, and then a more detailed account of flint from Neolithic features is included, as well as flint redeposited in Bronze Age and Iron Age features. Unstratified flint, and flint redeposited in later features, is included in Appendix 2.

Artefact types represented

L = length; W = width; D = depth

Cores

Many of the cores are ad hoc chunks or lumps with multiple irregular flake removals. Most of the cores have been worked to exhaustion. Cores were distributed throughout the area though there are slight 'hot spots'. On the cores traces of flake removal scars predominate over blade and bladelet scars in these areas. The incidence of cores is not proportionate with regard to the incidence of debitage. Group ST/FC from Area 26 contained an irregular single-platformed flake core (dimensions: L 104mm, W 44mm, D 37mm; 142g) that had been split in two in antiquity; the pieces perfectly conjoined. That particular core had a very heavily battered platform and punctiform bulbs. It is probable that it had been used as an anvil. The distribution of keeled cores is variable, with clusters appearing in some areas (e.g. Area 23). Core rejuvenation flakes are found in small numbers and are predominately plunging forms.

Hammerstones
Spherical and sub-spherical flints have been used as hammerstones. In some instances (e.g. group SA/CT from Trench 7) the pieces have also been used as anvils on which pieces of flint have rested during knapping. Hinged flakes and punctiform platforms are quite common.

Scrapers
A variety of forms are present and, due to the nature of the assemblage, when they occur they tend to be an admixture from different periods. A fine sub-circular extended end scraper manufactured on fine grained, olive-grey-coloured (Munsell (1991) 5Y 3/3) till flint was recovered from SA/CP. The piece measures 32mm in length and 35mm in width and is notable for possessing a multi-faceted platform, a pronounced bulb of percussion and extensive edge use wear. A fine convex extended end/horseshoe scraper from SA/BZ has most of the dorsal surface covered with cortex and an offset bulb of percussion. The implement has been extensively used. Broad 'horseshoe' extended end forms are rare, and outnumbered by scrapers made on cores. Double-sided scrapers are a rare form (one was present in Area 28 topsoil). Long end forms are notably scarce. These are defined here as scrapers manufactured on the proximal or distal ends of elongate flakes or blades with lengths measuring more than twice their breadth. Despite their relative scarcity a fine long end scraper came from SA/CQ.

A particularly rare typological form, the denticulate scraper, is present in the Ken Hill assemblages; examples come from Area 28 (ST/HS), topsoil in Area 24 and general topsoil; unfortunately all are unstratified. Scrapers have been manufactured on the coarse-grained flint available on site and finer till flint available from East Anglia. There is a slight bias in raw material selectivity with smaller end and extended end forms being made on finer flint. These are some of the few period-diagnostic pieces that probably represent a later Neolithic phase of activity.

Burins and gravers
Burins are of three main types; firstly, those intentionally manufactured by the removal of burinating spalls (e.g. SA/DQ from Trench 12) and secondly, ad hoc varieties formed by minimal retouching, typically on a spur of a hinged flake. The final varieties are un-retouched examples/gravers, where a flake facet has been utilised. In rare instances other support forms have been used; in SA/DU (from Trench 7) a burin was manufactured on a spurred projection from a core platform removal (rejuvenation flake).

A fine 'classic' dihedral burin was recovered from Trench 12 topsoil (SA/DS). Area 27 (ST/HM) produced a burin that had been manufactured on the point of a broad/broken flake. Two of the four gravers from Area 26 (ST/FC) are broad-hinged flakes on which use wear is clear on a spur resultant from the hinged termination.

Piercers
The piercers are predominantly defined by minimal retouch; in some instances (e.g. Area 14) a flake facet has been used without recourse to retouching. Two piercers from Area 26 (ST/FC) have been fashioned on fragments of cores and examples from SA/CU (Trench 7) and fieldwalking have been manufactured on core rejuvenation flakes. A piercer manufactured by slightly concave retouch on the left-hand side of a spur formed by the breakage of a broad flake was present in Area 21 (ST/HP).

Awls
The low number of awls is intriguing considering the high number of burins and piercers. Area 19 (ST/BN) contained a large flake that was shaped on its dorsal and ventral surface to form an awl. Manufactured on a dark olive flint, two finely worked and utilised examples comes from Area 26 (ST/EV & ST/HF)

Spurred pieces
Area 26 (ST/FC) contained a spurred flake; another example comes from the topsoil in Area 14. One of the best examples comes from the general unstratified assemblage: a flake with a projection defined by single notching of opposed margins.

Serrated pieces
A crude blade from Area 21 (ST/HP) possesses very fine edge serrations (<0.3mm depth, <0.2mm spacing) along a 35mm edge.

Notched pieces
Single, double and triple-notched pieces are present in proportionally large numbers. Many of the notches have been manufactured in an ad hoc fashion on chunks and chunky flakes. The number of notches on a flake/chunk varies but is predominately between two and three. The notches are mainly formed by retouching. An unstratified notch from Area 15 had been manufactured on a long end, flake scraper (catalogued as a notch). In some instances (Area 21, ST/HP), notches are shallow (<3mm) despite being extensively retouched.

Denticulates
Despite a large number of notched pieces in the assemblage, denticulates are quite rare. A fine example of a denticulate was found in Area 23 (ST/DR).

Laurel leaves
A fine though fragmentary laurel leaf was recovered from general fieldwalking. This piece is 30mm wide with a transverse snap fracture. Another example was present in Area 25 (ST/EO near feature ST38): a possible basal fragment from a large laurel leaf point. These probably represent an Early Neolithic phase on the site.

Fabricators
This is a relatively rare tool with predominately Neolithic associations. Area 28 topsoil produced a slightly curved rod-like fabricator of bi-convex section. Measuring 62mm in length by 20mm in width, the piece is heavily flaked and has characteristic tip abrasion on one end; such pieces have known Grooved Ware associations, for example at Carnaby Top, site 12, East Yorkshire (Manby 1974, 29, fig. 10.9). The fabricator from Area 26 (ST/FD) is a chunky double-edged

blade with abrasion; the example from ST/FC, also in Area 26, is a rather crude stubby flake example. Area 24 (ST/DW) produced a large elongated battered piece that is probably a fabricator or a pick.

Knives

Knives are present in the assemblage from fieldwalking north and east of the wood and the topsoil in Area 28. These are both crude haphazard examples. Topsoil in Area 28 contained a proximal fragment from a very fine broad (29mm wide) double-edged flake knife with straight side retouch and heavy dorsal cortex. Two flake knives come from Area 26, one from ST/FC and one from ST/FD. One of the examples from ST/FC is a rather unusual flake knife with straight left-hand-side retouch on the side of a triangular-shaped flake support with a large hinged termination. The ventral proximal surface has had the bulb removed by flaking. This context also produced a plano-convex knife that resembles a tip fragment but is in fact intact. The example from ST/FD is crude, sub-oval in plan with retouch on both lateral margins and transverse ventral, distal retouch. A fragmentary flake knife with extensive edge use was recovered during fieldwalking in Area 27. The piece was a trancheform cortical flake with some resemblance to a transverse arrowhead. ST/EO (Area 25), contained an 'old looking' right-hand-side (semi-convex) flake knife. A fine single-edged flake knife with slight backing and dorsal blade scars comes from SA/DQ (Trench 12). An atypical knife was recovered from SA/BX in Trench 6. The knife is manufactured on the ventral surface of a large (length 50mm, width 44mm) crested, sub-ovate coarse-grained, light olive-grey-coloured raw material (Munsell 5Y 6/1) and possesses a cortical butt. Resembling a Neolithic 'horseshoe scraper', the ventral face has convex, invasive scalar flaking (17° edge angle) running from the distal to the right-hand margin.

Sickle

An irregular tertiary flake of fine-grained moderate yellowish-brown flint (Munsell 10YR 5/4) has a curved/crescentic edge defined by a small area of invasive flaking; the distal face of the implement possesses use wear and a high gloss that is consistent with the piece being used as a sickle.

Arrowheads

Unusually rare; there are far more flakes associated with the production of arrowheads than extant examples. It is possible that a couple of the miscellaneous retouched flakes from fieldwalking were initially intended to be large leaf arrowheads that failed during manufacture, one of the best examples being from Area 27. The finest example of an arrowhead is a slender minimally retouched piece manufactured on a blade and measuring 48mm (SN/NP) found during the 1990 excavations (Pit SN29). Area 26 fieldwalking produced a fine example of an unfinished oblique arrowhead of Clark's (1934) class G. The tip is missing due to post-depositional damage. Another example was present in the topsoil assemblage from Area 28. The piece appears to have failed during manufacture with an oblique distal breakage. Subsequently the piece was re-used as there is cutting wear on one margin extending to the breakage. Area 25, feature ST38, ST/EQ produced a burnt fragment of a large leaf arrowhead. Such pieces have primarily Early to Middle Neolithic associations. An unusual form of arrowhead was recovered from the general unstratified assemblage. The piece is a blade-like flake (length 40mm, width 20mm) with multiple dorsal bladelet, scars, and its proximal end has been invasively flaked to form a point. The distal end appears to have been snapped and the distal left-hand margin has three very small notches (1 x 1mm). The right-hand margin has another very small notch. These are probably notches to aid in binding the arrowhead to a shaft.

Axes

There is more evidence for axe manufacture and usage than intact and fragmentary axes. A highly polished flake from a polished flint axe was present in Area 20 (ST/CU), made on local pale yellowish-brown (Munsell 10YR 6/2) coarse-grained flint. The flake has been intentionally removed, probably to improve the surface appearance of the axe. After removal the flake has been lightly used in a cutting motion. The utilisation wear cuts through the polish. Trench 7, Feature 5, contained a polished green stone axe fragment (SA/CZ). There are pieces in the assemblage that look like they come from the finishing of flint flake axes (ST/HP, Area 21).

Microliths

Note: the location of retouch on microliths has been classified in relation to the point/tip rather than the bulb of percussion.

A small microlith (24mm long) was recovered from SA/AJ (Trench 5); the piece has right hand-side retouch and is in an unusually fresh state. The point of this piece has been fashioned on the distal as is usual for such pieces. An edge-blunted point with oblique distal right-hand-side retouch was present in the topsoil assemblage from Area 14. These represent evidence of later Mesolithic activity on the site. Micro-bladelets of possible Mesolithic aspect are present in small numbers.

Shouldered blades

Area 21 (ST/HP) contained a shouldered (left-hand side) blade with slight left-hand retouch and oblique left-hand distal retouch. Fieldwalking in Area 20 (ST/AS) produced a piercer that had been manufactured on a shouldered flake. These are normally pre-Neolithic although it is possible that they could be Early Neolithic.

Spurred pieces

Area 28 contained a spur manufactured on a discoidal core. The spur being defined by a slight marginal retouch of a flaking facet that forms a triangular projection.

Discussion

Since all the lithics were recovered in the stripped areas, the apparent lack of retouched material represents a genuine spatial distributional trait that has not been created by archaeological recovery sample bias. There is a restricted

typological range of tools, with scrapers being in an unusually low proportion, whereas notches, burins and awls are present in numbers that are pro-rate a factor of ten times what might be expected. The notches show evidence of wood-working and may relate to woodland clearance in the Neolithic. The notched pieces appear to have been used to work wood; limited macro-wear suggests that some pieces may have been used as a kind of 'spoke shave', perhaps even used for the fashioning of wooden arrow shafts. However, it is of note that arrowheads are scarce, yet the debitage is indicative of the manufacture of both Early Neolithic leaf forms and later Neolithic oblique forms; Early Bronze Age barb-and-tang forms are absent. Burning is present throughout the assemblage and it relates to more than one functional cause. Interestingly, the distribution of cores does not always correlate with increased abundance of flint debitage and there are instances where beach-derived raw material was being used.

There are elements of Mesolithic and later Neolithic flint-working but the assemblage appears to be predominantly Early to Middle Neolithic. The Bronze Age material has been completely dispersed by modern agriculture.

Flint from Neolithic features

Pit SN21 (Area 2)

SN/RK: This group contained three pieces: one broken primary flake, one secondary and one tertiary flake. The primary and secondary flakes are of coarse-grained flint and probably come from the same piece. The tertiary flake is made of fine-grained olive-grey till flint (Munsell 5Y 3/2). The pieces are very fresh and do not look residual. They are undatable.

Pit SN23 (Area 1)

SN/ML* (mislabelled on bag and flint as SN/NL): A single chunky tertiary flake with platform facets.

SN/RL: This group contained five pieces of flint: a keeled blade core with three platforms, two flakes and two broken blades. The material is not in a fresh state and looks like an admixed assemblage.

Pit SN24 (Area 1)

SN/MM: A single small flake (25mm long) with platform trimming and minimal cortex the piece has recent (probably excavation) damage.

SN/RM (mislabelled on bag as SN/RN): This group contained three pieces: a secondary flake, a tertiary flake and a medial fragment of a single-crested bladelet. All are made from the same, possibly even the same nodule of fine-grained olive-grey (Munsell 5Y 3/2) till flint. The pieces are very fresh and do not look residual. They are probably Neolithic.

Pit SN28 (Area 2)

SN/OD: Two flints consisting of a small tertiary flake and an edge utilised (left hand side) blade; which retains traces of a core platform.

SN/RG: Totalling 36 pieces, this is a very homogeneous assemblage that may result from as few as four separate nodules of flint. Flake debitage totals 27 pieces from the following stages of reduction:

Cortical primary flakes = 6 (average size 41 x 32mm)

Secondary flakes = 6 (average size 26 x 14mm)

Tertiary flakes = 15 (average size 29 x 22mm and 18 x 10mm)

The tertiary debitage is very interesting; all is in a very fresh state and olive-grey (Munsell 5Y 3/2) fine-grained till flint. Six small, sub-oval-shaped pieces of debitage. In addition to flakes the assemblage includes seven small bladelets (three broken) with one particularly fine example (length 36mm, width 10mm). There are no cores but a single plunging core rejuvenation flake is present. The only retouched piece is an almost totally corticated flake with two small areas of nondescript retouch. This flint assemblage is probably Early Neolithic.

Pit SN29 (Area 2)

SN/NP: fine rare example of a minimally retouched slender lanceolate leaf-shaped arrowhead that has been manufactured on a single crested tertiary blade of medium to fine grained, light brownish grey (Munsell (1991) 5YR 6/1) till flint. The piece is between Green's (1980, 71) size 2–3 and of form C; measuring 48mm in length and 17mm in breadth (at widest point). Minimally retouched on its distal-dorsal/ventral and proximal-ventral, the piece is in pristine condition and does not appear to have been used.

SN/RJ: A small flint assemblage amounting to 24 pieces. There is a high degree of consistency in the flint which is in a very fresh state with six pieces being broken. Primary, secondary and tertiary flakes are present but the dominant feature of the assemblage is the high proportion of bladelets (average length 38mm) and blades (average length 33mm). Un-retouched bladelets amount to six pieces (three broken) and blades, two pieces (one broken). The flake debitage amounts to nine pieces (five primary, two secondary, two tertiary) and two chippings. One of the flakes shows very fine platform-edge trimming. There are two edge-retouched pieces; one is a broad edge-retouched flake with fine right-hand-side marginal retouch, which exhibits slight traces of edge use wear. The other piece is a proximal blade fragment with left-hand retouch. One tertiary flake shows use wear. A fragment from a single-crested bladelet has a notch on its left-hand margin; it is not possible to ascertain if this is due to accidental attrition or intentional; possibly as part of micro-burin manufacture. Most interesting is a tanged bladelet with a small area of minimal edge retouch on the proximal left-hand side. These last two pieces are more characteristic of later Mesolithic flint assemblages rather than later Neolithic or Early Bronze Age assemblages; as such this feature could be one of the earliest of the Ken Hill assemblages. The assemblage could be Early Neolithic and possibly even Mesolithic.

Pit SN30 (Area 7)

SN/MV: A double crested plunging, tertiary blade (almost core rejuvenation) of Neolithic aspect. The piece is in a fresh condition.

SN/NA: A collection of 9 predominately fresh-looking pieces, comprising 8 flakes and 1 bladelet. Four of the flakes

are notably broad and come from early stages of core reduction (knapping). Two broad flakes almost conjoin, it looks as though the assemblage is derived from three separate nodules of raw material. One flake has surface gloss that results from the piece having been in the proximity of burning.

(Also polished stone axe SN/NB*) Missing

Feature ST38 (Area 25)
Burnt area and flint concentration. Three flint concentrations are associated with this feature: ST/EP and EQ within the feature, defined by respective areas of burning, and ST/EO comprising a spread immediately to the west of the feature.

ST/EP: Two flints: a struck primary flake with a pebble cortex and broad (32mm) tertiary flake with two proximal notches. The piece does not appear to have been used.

ST/EQ: The focus of the concentration was a flint core or hammerstone (extensive burning precludes accurate identification) associated with two fragments, three large tertiary flakes, two chunks, 17 small tertiary flakes (average length <20mm, width 20mm) and 107 (3.5g) small spalls (<4mm). All of the flint has been heavily burnt, consistent with having been in a fire; the pieces are calcined white to light grey in colour. In addition to the debitage and cores there is a calcined (white) medial and end fragment from a large (Green 1980: size class 2) finely shaped edge-retouched, pointed, leaf arrowhead. The form of arrowhead is most frequently found in Early to Middle Neolithic assemblages.

ST/EO: The assemblage totals 33 pieces. Notable pieces include three notched pieces, a flake knife and a small circular side and a possible basal fragment from a large laurel leaf point. The knife looks more residual than the rest of the material from the same context. The scrapers are characteristic of later Neolithic and Beaker type flint assemblages. The laurel leaf point is perhaps indicative of an Early to Middle Neolithic date.

Feature ST39 (Area 25): flint concentration
ST/ER: A small concentration of 24 flints including six cores, two core rejuvenation flakes, one notched flake, five flakes, eight chippings and two hammerstones. The hammerstones consisted of a very heavily battered lump and a re-purposed burnt core fragments. The assemblage was associated with pottery, and burning. Despite the fact that three of the cores are undiagnostic globular flake cores there is a degree of uniformity in the material. The two core rejuvenation flakes are consistent with the cores and comprise one sub-pyramidal-shaped basal removal and a flake that was struck down the core face. The notched flake is a very crude example. The concentration was from a reasonably small area and looked as though it was from the fill of a small ploughed-out pit or post hole. It is intriguing that only five flakes were found in association with the cores and only one retouched piece. It looks as though this was the remains of a knapping event from which material had been removed for use.

Feature ST40 (Area 25)
Burnt soil and flint. A small circular feature measuring 25 by 25cm and 14cm deep contained a large amount of burnt flint and carrstone.

ST/ES: There is a large quantity of small burnt flint spalls in the 3–5mm size range. These total about 12,300 pieces (weight 300g). There are a further 62 burnt flint chunks/flakes measuring between 10 and 25mm and 28 pieces measuring 25 to 45mm. Three larger pieces consist of two burnt pebbles: one of sandstone, one of flint and a flint lump measuring 65mm in length. The only struck flint was a heavily burnt unclassifiable core fragment. The flint spalls are of various forms and no fragments of tools or conventional knapping debitage are present. It appears as though the pieces have been intentionally burnt and crushed. It is most probable that this represents a spread of material that was being intentionally crushed to provide flint temper for prehistoric pottery production.

Feature ST43
A small circular burnt patch 25cm wide and 8cm deep.

ST/HT: 14 flints composed of four flakes, nine chunks (1–2cm in length) and a single chipping (<1cm). All the pieces are calcined and archaeological.

Flint from Late Bronze Age to Earlier Iron Age features

Pit SN25 (Area 3)
SE/BZ: Found on the pit surface and probably a residual Neolithic piece. The single flint is a broad, secondary flake with traces of use wear on its ventral left and right-hand margins.

Flint from Late Iron Age features

Hoard H (Area 4)
SN/EB: Two flints found in the top fill of the hoard H. These comprised a broken secondary flake and a core rejuvenation flake (platform removal) with slight ventral-convex retouch. The flake has post depositional damage. Both pieces are of a later Neolithic character.

Unstratified and redeposited flint from Phase 4–5 features, including the enclosure ditch, is included in Appendix 2 with the other unstratified flint.

Neolithic stone objects
Peter Makey and Julia Farley

ST/GR: Neolithic polished stone axe
Complete, some light abrasions on surface, possibly due to agricultural damage. Slight chip to the cutting edge. Rough, greyish stone with dark, reddish ferritic inclusions. Curved on one face, slightly flatter on the other. Uncertain axe group.

Dimensions: Weight: 373.1g; length: 120mm; maximum width: 64mm

Context: Topsoil/subsoil (1991, Area 21)

SN/NB: Neolithic polished stone axe*
Complete
Context: Neolithic pit SN30 (1990, Area 7)

ST/ET: Neolithic polished stone axe fragment
Broken fragment, comprising the damaged blade end, with several large chips broken away from each face, broken in half across the centre. Fine, polished greyish stone, with some reddish areas of the surface possibly indicating heating. Axe IP group VI

Dimensions: Weight: 108.5g; maximum remaining length: 48mm; maximum width: 64mm

Context: Topsoil/subsoil (1991, Area 21)

SA/CZ: Flake from Neolithic polished stone axe [Axe IP group VI]
Epidotised greenstone. A thin (5.57mm) marginal medial surface flake. Does not look like a re-sharpening flake but there is a bulb from its removal. Some grinding marks are still visible on the ground surface

Dimensions: Weight: 8.28g; maximum remaining length: 34.5mm; maximum width: 28.6mm Colour: Nearest match light olive brown (Munsell 5YR 5/6)

Context: Ditch SA7/5, Section A East 2.40 North 12.60: 21cm below feature surface (1992, Trench 7).

SA/CH: Stone axe-hammer or mace head, unfinished. Manufactured from the local (on-site) carrstone, showing characteristic banding.

Colour: Moderate brown (Munsell 5YR 4/4)

The piece split during manufacture due to an inherent fracture in the raw material initiated by the drilling of hour-glass perforations. The tapering perforation on the upper face is 15mm deep and 13mm wide. The lower face (defined by a natural flatter surface) is 15mm wide at lip and 10mm wide at base, and 18mm deep. The perforations are offset with the lower face being 13mm from the edge of the axe. The hole is only 23mm from the back of the piece. Other than drilling, the stone is unmodified.

Dimensions: Length: 94mm; width 57mm; thickness: 44mm; weight: 314.4g

Context: Ditch SA7/6 (1992, Trench 7)

*Not located at time of publication

Discussion

The main evidence for Early Neolithic occupation at Ken Hill takes the form of a cluster of seven pits in the vicinity of the hoards, another outlying pit, and areas of burning and/or flint concentrations which are more widely distributed across the site. It should be noted that the proximity of the main Neolithic pit cluster to the Late Iron Age hoards is most likely due to recovery bias. This was the only area of the site which was fully investigated below the ploughsoil. After these pits were discovered, the excavators attempted to leave Neolithic material undisturbed where possible, so it is highly likely that further Neolithic pits remained undetected in other areas of the site. The Neolithic ceramic assemblage is overwhelmingly Early Neolithic, and the lithic assemblage is predominantly Early to Middle Neolithic. There is very little evidence for later Neolithic activity at the site, although some of the flint may date from this period. Lithic finds also suggest activity stretching back as far as the Mesolithic period, a possibility supported by earlier stray finds of

Figure 6.3 Pit SN26, showing the large deposit of cobbles

Mesolithic flakes and points from the immediate vicinity (NHER 1487).

Early Neolithic pit-cluster sites are widespread across Norfolk, with well-studied examples at Spong Hill (33km from Snettisham; Healy 1988; 2013) and Kilverstone (55km from Snettisham; Garrow 2006, 40–58). As a coastal site on the northern fen-edge, Snettisham is something of a geographical outlier; most pit-cluster sites are located on light soils in inland river valleys, generally sited on relatively low-lying ground, just above the flood-plain of the nearest river (Garrow 2006, fig. 3.7, 26). Evidence varies, but generally suggests persistent use of these sites in the form of intermittent occupation events, rather than long periods of continuous settlement. Garrow (2006, 59) has suggested that such intermittent periods of occupation may have varied in length, from days or weeks (perhaps on a seasonal basis) to a few years.

Many activities are attested; Garrow (2006, 57) suggests that these were sites where: 'flint was knapped, pots used and broken, fires lit; cereals were processed and wild resources eaten, and we can probably assume that domestic animals were kept.' Where re-fitting of lithic material and re-joining of pottery has been attempted, as at Kilverstone, the evidence suggests that occupation debris was allowed to accumulate in a pre-pit context such as a midden, with joining sherds subject to different degrees of weathering and some re-fitting lithics showing burning or other modification while these features are absent in others (Healy 2013). Pits were subsequently dug in which to deposit the midden material, a process perhaps connected to abandonment of the site (Healy 1988, 106). At sites such as Spong Hill and

Kilverstone, series of intercutting pits suggest successive episodes of digging and infilling, supporting the argument that the pit clusters were created over discontinuous episodes of occupation (Healy 2013; Garrow *et al.* 2006).

Percival (above) suggests that the high degree of fragmentation and presence of both burnt and fresh sherds in the Phase 1 features at Snettisham is consistent with the infilling of these pits with domestic debris from pre-pit or midden material. Joining sherds were also found in two separate pits in the main cluster, supporting the argument that the pits were filled with material from a single source. Whilst most of the pit fills do not appear to have been internally structured, the large number of cobbles in pit SN26 (**Fig. 6.3**), may represent a placed deposit.

A small pit cluster such as that seen at Snettisham could have developed over a relatively short period. Garrow (2006, 59) has suggested that: 'The scale and longevity of… re-occupations may have varied significantly, from visits perhaps involving a handful of people and lasting a few days or weeks (generating two or three pits and relatively little material) to those which perhaps involved many more people, and lasted months or even years (generating 12 or 15 pits and large amounts).' While a short focus of activity of just 1–35 years (at 95% probability) is suggested for a pit site at St Osyth in Essex (Hamilton *et al.* 2007), elsewhere the extensive radiocarbon dating programmes necessary to narrow down use-life have not been carried out. Thus, at other sites, a longer timescale in the order of several centuries is also possible (Healy 2013, 16).

No organic material was found in the Neolithic pits at Snettisham, and so it was not possible to carry out radiocarbon dating for this phase. At Kilverstone, which has produced a very similar ceramic assemblage, the Early Neolithic pit clusters have been dated to *c.* 3650–3400 BC (Garrow *et al.* 2006, 72), and it is likely that the activity at Snettisham dates to around the same time.

Chapter 7
Phase 2: Bronze Age to Earlier Iron Age (*c.* 2500–350 BC)

Julia Farley and Jody Joy, with contributions by Sarah Percival, Alan Pipe and John Davies

There is little evidence for later Neolithic activity at Snettisham, and only very limited indications of an Early Bronze Age presence (comprising a very small number of pot sherds, including a few fragments of Beaker). After the Early Neolithic pit cluster, the next major phase of activity dates to the Late Bronze Age to Earlier Iron Age (*c.* 1100–350 BC). The main evidence comes from ceramic deposits in pit SN25 and other features, though there are also a handful of stray finds of metalwork and an antler bridle-bit from the wooded area to the west of the 'gold field' which can be stylistically dated to the Late Bronze Age or Earlier Iron Age.

This chapter presents the evidence from excavation, and specialist reports on the Bronze Age to Earlier Iron Age pottery and antler cheekpiece. A short summary of the metal finds is included, though the detailed catalogue entries for these objects are found alongside the other metalwork in Part II of this volume. The approach to the animal bone from the site is covered below, as this is the first phase which produced bone: a small amount of unidentified calcined bone from a pit with no other finds. The bone was radiocarbon dated to the Late Bronze Age, but otherwise dating for this period is based on ceramic evidence.

Bronze Age to Earlier Iron Age features

Figures 7.1–2 and **Table 7.1** detail the Phase 2 features at the site, excavated in 1990 and 1992. The only Phase 2 features from 1990 were pits SN31 and SN25. Pit SN25 was located to the east of the main concentration of metalwork hoards and contained a large quantity of Earlier Iron Age pottery. Pit SN31 was shallow and contained only a very small quantity of burnt bone (unidentified mammal, see below). The 1992 excavations revealed likely Phase 2 features in two areas: Trench 7 and Trench 12, both to the south of the hoards. In Trench 7, many features were heavily disturbed, but some certainly date to Phase 2. The trench as a whole produced a large quantity of Earlier Iron Age pottery, much of it residual in later ditch SA7/5, suggesting that the excavation of this ditch may have disturbed earlier features. Most of the relatively large number of features uncovered in Trench 12 were the remains of animal burrows, but one (SA12/6) is a possible hearth, and many produced Earlier Iron Age pottery.

Features likely dating to Phase 2:

SN25: Pit, 0.6 by 0.5m, 0.15m deep, containing a large quantity of pottery, likely dating to a single episode in the Earlier Iron Age. Sherds: SE/A–Z and SE/AA–BY. Flint: SE/BZ was recovered from the surface of the pit, likely residual. (The special two-letter code SE was assigned specifically to finds from this pit, although it was excavated in 1990, when most finds were assigned code SN. See Ch. 1).

SN31: Shallow pit with traces of burning, containing a small amount of calcined bone. Bone: SN/FE. The bone was radiocarbon dated to 1130–930 cal BC (at 95% probability, see **Table 5.3**).

SA7/2: Base of flint-gritted pot containing burnt stones, sitting in a small scoop in the natural. Burnt stones; pot base: SA/CD.

SA7/10: Pit, 0.5m in diameter, 0.2m deep, well defined except the south-west corner, which showed possible

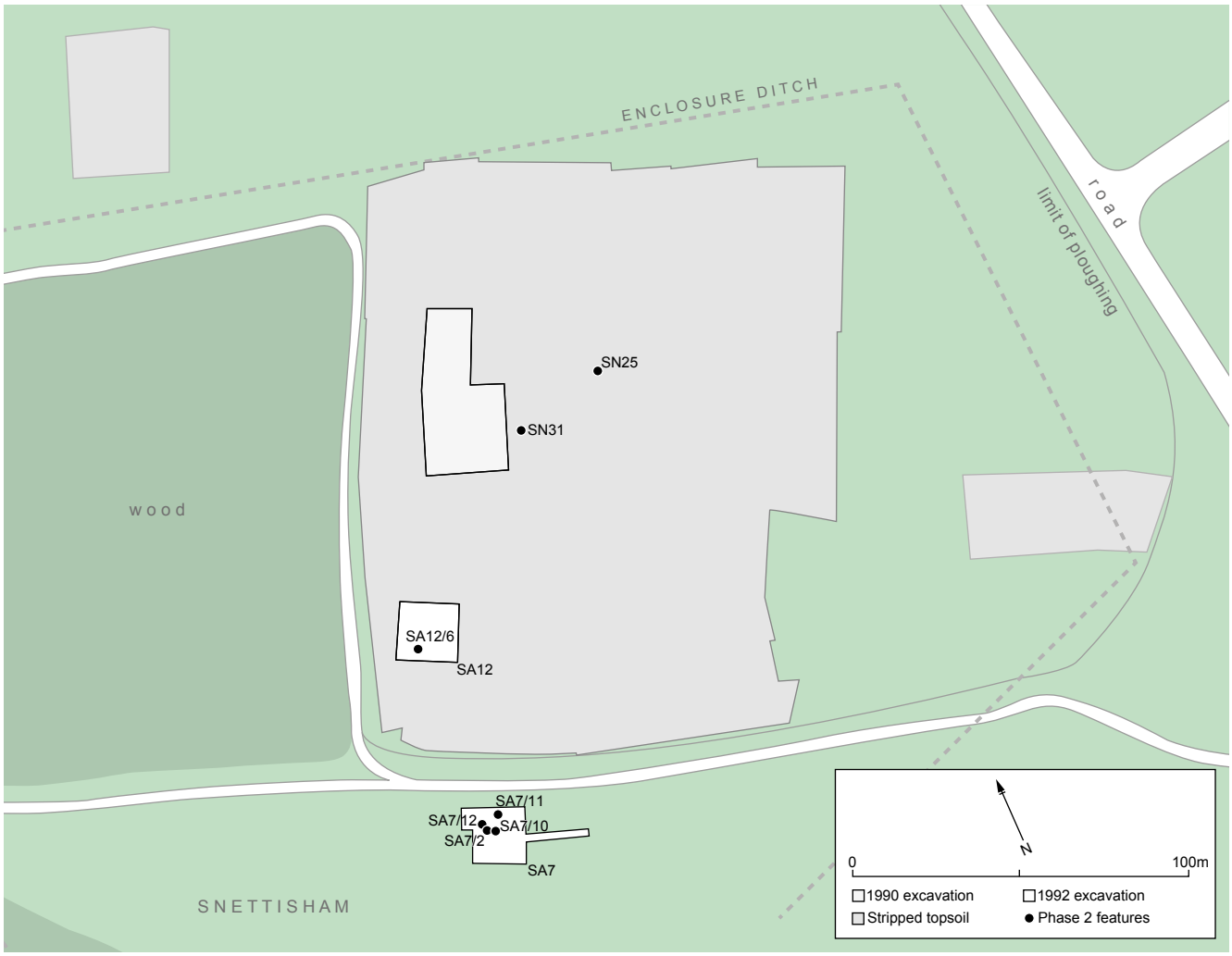
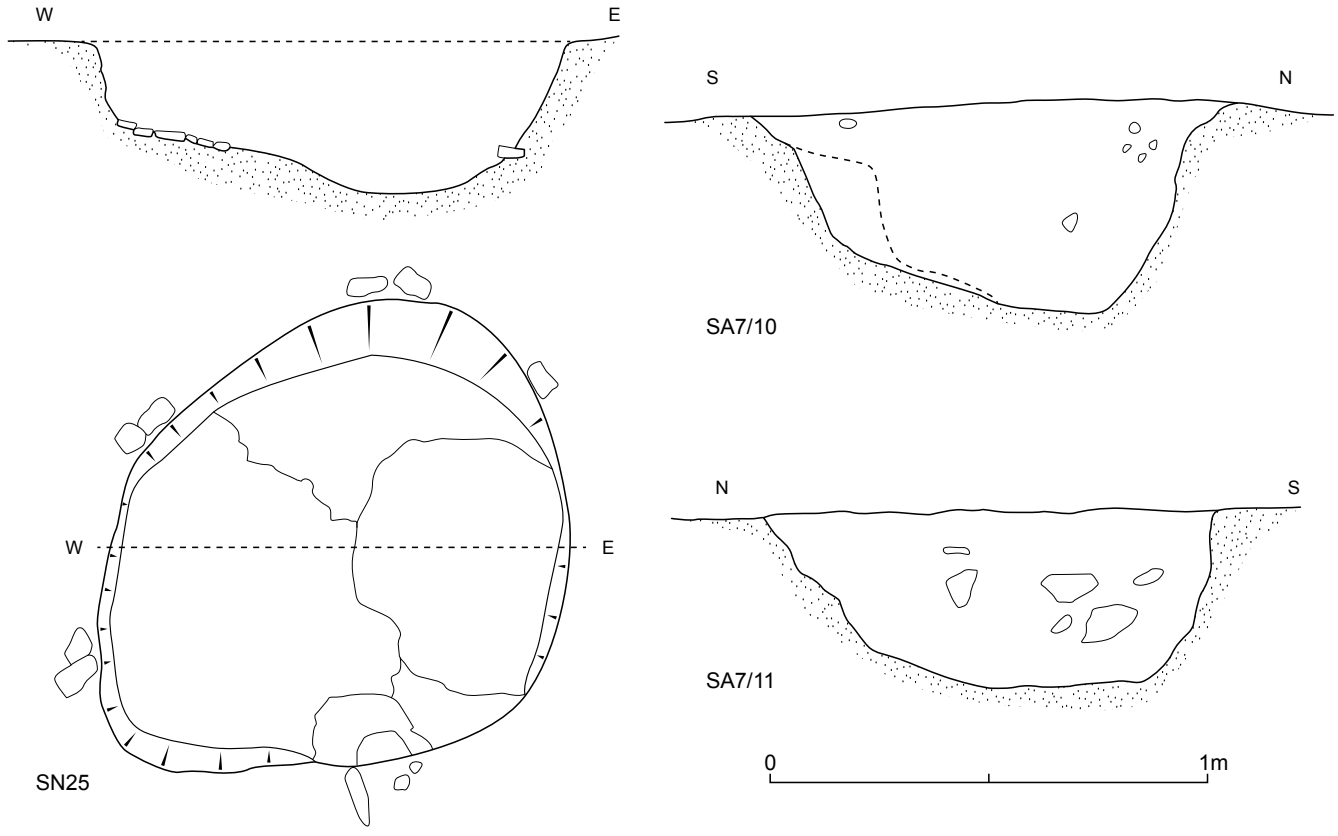


Figure 7.1 Plan showing locations of Phase 2 features

Figure 7.2 Phase 2 feature plans and sections (SN25, SA7/10 and SA7/11)



burrowing disturbance, containing flint, stones and pot sherds with a single fill. The bottom of the pit was greenish, weathered sand. Flints: SA/DL, SA/DM, SA/JL*; sherds: SA/DL, SA/DM, SA/JL.

SA7/11: Pit, 0.5–0.6m in diameter, 0.2–0.25m deep. Single fill of dark-grey ash, containing many burnt stones (size 2–10cm). The pit was steep sided with a flat base, somewhat disturbed by burrowing. Sherds: SA/JM, SA/JN; flints: SA/JM*, SA/JN*.

SA7/12: Pit, 0.5m in diameter, 0.3m deep. Steep sided, cut by much later ditch SA7/5. Contained burnt stone, although there was no sign of ash or charcoal, suggesting that the stones were heated elsewhere before deposition in the pit.

SA12/6: Possible hearth, approx. 0.45m in diameter, containing burnt material including stones, pot sherds and flint. Sherds: SA/KE; flints: SA/JT, SA/KE*.

Later Neolithic to Earlier Iron Age Pottery

Sarah Percival

This section presents the Phase 2 pottery. For Methodology, see Chapter 6.

This pottery report uses the ceramic chronology 'Earliest Iron Age' spanning *c.* 800–600 BC, 'Early Iron Age' starting in *c.* 800 BC and continuing until 400/350 BC and Middle Iron Age *c.* 350–50 BC (Brudenell 2012). For the pottery this Earliest/Earlier Iron Age terminology is kept here.

The Phase 3 activity at Snettisham cannot be neatly divided into 'Middle' and 'Late' Iron Age (see Ch. 8). For that reason, in the rest of this volume the terms 'Earlier Iron Age' (*c.* 800–350 BC) and 'Later Iron Age' (from *c.* 350 BC) are generally used, to distinguish between Phase 2 (this chapter) and later activity.

Later Neolithic to Early Bronze Age pottery

A total of 35 Later Neolithic to Early Bronze Age sherds weighing 146g were collected from topsoil in Areas 1 and 4 (SN/BY, SN/KS, SN/NL, SN/HZ, SN/KA and SN/KS). The sherds are small with a mean sherd weight of just over 4g and are in poor condition. The assemblage includes three sherds of Beaker weighing 9g (SN/HZ, SN/KA and SN/KS) comprising a rim and body sherd in sandy, grog-tempered fabric with fingernail-impressed decoration and fingertip rustication, and an undecorated body sherd in similar fabric. These fabrics compare well with Beaker assemblages found locally, for example at Hockwold (Healy 1996, fig. 61). The decorated sherds find parallel with domestic Beaker found locally at Runcton Holme and Reffley Wood on the outskirts of King's Lynn (Gibson 1982, fig. R.H.1, 6; fig. REF.1, 5).

The Beaker sherds were found during cleaning of stripped surfaces. Though Beaker is frequently found in pits it is also common in preserved soil layers, having originally been deposited in surface accumulations of which only a portion was eventually incorporated into cut features (Healy 2012, 157). Healy dates the start of non-funerary use of Beaker in southern Britain to be around 2490–2200 cal BC (at 95% probability; Healy 2012, 158).

Ex. year	Area	Feature	Type
1990	Area 3	SN25	Pit
1990	Area 1	SN31	Pit
1992	Trench 7	SA7/2	Scoop/hollow
1992	Trench 7	SA7/10	Pit
1992	Trench 7	SA7/11	Pit
1992	Trench 7	SA7/12	Pit
1992	Trench 12	SA12/6	?Hearth

Table 7.1 Phase 2 features

Post Deverel-Rimbury (PDR) pottery

The largest component of the prehistoric pottery assemblage is of Post Deverel-Rimbury type with 2,513 Later Bronze Age to Earlier Iron Age sherds weighing 13,217g recovered from three feature types. A total of 874 sherds (6,147g) came from pits and hollows, principally SN25 which contained 700 sherds (4,619g). A further 728 sherds (2,940g) came from ditches, whilst the later Romano-British enclosure ditch produced 42 re-deposited sherds (243g). The remainder came from cleaning and unstratified contexts which produced 823 sherds (3,711g). The condition of the sherds is generally poor and the assemblage has an average sherd weight of 5g.

The PDR pottery is chiefly made of flint-tempered fabrics which form 98% of the assemblage by weight and 96% by sherd count. The extensive use of flint as a tempering material is rather problematic for dating the pottery as the small and undiagnostic body sherds which form the bulk of the assemblage are hard to distinguish from Early Neolithic pottery in similar fabrics; however, the characteristic wiped and textured surfaces of the PDR sherds allow for some differentiation. Five flint-tempered fabrics were identified, showing a range of flint inclusion size and density, the most abundant fabric containing moderate to common medium flint pieces (fabric F1). Other fabrics within the PDR assemblage were present only in small quantities. These include a sandy fabric (4% by count, 2% by weight) and organic, grog and shell-tempered fabrics (each forming less than 1% of the assemblage). The range of fabrics is typical of PDR assemblages in the region, with the addition of crushed burnt flint being characteristic of Later Bronze Age and Earlier Iron Age ceramics from Norfolk, Suffolk and eastern parts of the fen edge in Cambridgeshire (Brudenell 2012, table 4.2). Flint is readily available in the alluvial gravels local to Snettisham and was heated, crushed and added to clay to produce the characteristic fabric. The other fabrics present also contain inclusions which could be sourced locally to the site. The shell-tempered fabric may derive from local Snettisham Clay deposits which contain an abundant shelly fauna (British Geological Survey online database), though the shell-tempered pots may have been imported to Snettisham from across the Wash in Lincolnshire where shell-tempered fabrics, made from fossil-rich Jurassic clays, predominated.

The pottery forms are described using a combination of vessel categories, including a division into fine and coarse wares, vessel type and form (following Brudenell 2012). Many rim and upper body sherds were too small to identify;

however, a minimum of 61 separate vessels were identified by rim count of which 43 could be identified to form. As with most PDR assemblages, coarse ware jars predominate making up over half of the identifiable vessels represented within the assemblage (**Table 7.2**) and around 70% of the overall assemblage by weight and count. Coarse ware body sherds typically have rough wiping, round vertical wiping or finger-textured surfaces. The most frequently occurring vessel form is the neutral or open jar with high, rounded shoulders and upright or out-turned neck (form F). These jars occur in a range of sizes with rim diameters between 90 and 260mm. Two examples have fingertip-impressed decoration to the rim top, four have smoothed surfaces and most roughly wiped surfaces.

With a similar body shape to the shouldered jar form F, form G jars also have a neutral or open profile, high slack or weakly defined shoulders and upright, hollowed or out-turned necks. Form G are the next most common jar form in the assemblage, with four examples recorded of which one has slashed decoration to the rim top.

A range of ovoid closed jar forms is also present (forms A, B, C and D). These vessels have restricted necks or rims and ovoid bodies with direct, upright or slightly everted rims. Two rims are decorated with fingertip impressions, one to the rim top and one to the rim edge. Rim diameters span 120mm to 160mm.

Fine vessels are mostly distinguished by the presence of finely smoothed or burnished surfaces. A little under 30% of the assemblage by weight is burnished (28% by sherd count). Fine jars are rare with only one example identified. Fine bowls are more common though still more poorly represented than coarse jars. Several of the fine bowls, identified from distinctive decorated body sherds with smoothed or burnished surfaces, are from bipartite bowls with pronounced rounded or angular shoulder and inward-sloping neck, beaded or rounded rims and incised double or triple bands of decoration on the neck (Type M, Brudenell 2012 fig. 5.15, 17). This distinctive form is present in Norfolk, north-west Suffolk, and the eastern tip of Cambridgeshire in Earliest and Earlier Iron Age assemblages (Brudenell 2012, 239). Rims from five fine round-bodied bowls with rounded bead or everted rims and smoothed surfaces were also recovered (form K).

The assemblage also includes rims from ten small, fine, undecorated cups. Thin and finely finished body sherds present in the remainder of the assemblage indicate that these vessels were fairly well represented. The cups have rim diameters of between 90mm and 110mm and are found in a range of forms which mimic the full-sized vessels (**Table 7.2**).

Base sherds are poorly represented in the assemblage with just 21 examples recorded. These bases often have grit adhering to the underside, a characteristic trait of PDR assemblages, perhaps associated with manufacture. The bases are mostly simple base angles though some are pinched out, thumbed or stepped. The assemblage includes one handle or lug (SN/EC) similar to examples found at Clay Farm, Cambridgeshire dated to the Earlier Iron Age (M. Brudenell pers. comm.).

Decoration is rare, occurring on only 2% of the total assemblage by count and 3% by weight. On coarse wares where present the decoration consists of fingertip or fingernail impressions to the rim top (SA/JN, SE/A, SE/AN, SE/BU) or edge (SA/GO and SA/GP), limited fingertip impressions to the shoulder (SA/GR) and at least one vessel with fingertip rustication all over (SE/U). Fingertip decoration to the rim and shoulder is fairly common within Norfolk PDR assemblages such as West Harling and Trowse with Newton (Clark and Fell 1953; Percival 2000). Vessels with all-over rustication are found in Earliest and Earlier Iron Age assemblages all over East Anglia though, as Brudenell notes, are limited to only a few examples per assemblage (Brudenell 2012, 249, fig. 6.25). Locally, rusticated vessels have been found at Beeston Quarry (Ashwin and Flitcroft 1999, 244, fig. 23, P34) and West Harling (Clark and Fell 1953, 18, fig. 12, no. 26). Fine wares in the region are also mostly undecorated with the exception of the bipartite bowls which have double or triple-incised bands, one with a row of line stabbed dots along the cordon (Ashwin and Bates 2000, fig. 149, P113).

Three sherds have red haematite coating (SN/EP, SN/JV and SN/BV). This distinctive Earlier Iron Age pottery is rare in East Anglia though it has been previously found in fieldwalked material at Ken Hill (NHER 1490) as well as on the Aylsham Bypass with distribution perhaps focused on sites around the Icknield Way (Brudenell 2012, fig. 6.22).

The context of recovery for the PDR pottery includes around one third collected from pits, principally SN25 which produced 27% of the total PDR assemblage by sherd count and 34% by weight including rims from four vessels: three fine round-bodied bowls and a coarse rim from a vessel with all-over fingertip rustication. Within the assemblage from SN25 three groups, recovered at different points in the fill (SE/A, SE/AN and SE/BU), contained conjoining sherds from the same fine bowl. The average sherd weight for the feature is 7g, slightly larger than the overall assemblage average. The presence of conjoining sherds across finds collection units in the pit indicates that the material within it was probably deposited together or at least from the same source, whilst the incorporation of at least three fine bowls might indicate that the assemblage derived from a specific event, perhaps associated with food consumption.

Aside from pit SN25 and the Romano-British enclosure ditches (see below), the only archaeological features which produced PDR sherds were in Trenches 7 and 12, both located immediately south of the area which produced the Later Iron Age metalwork hoards. Some of these features may represent prehistoric activity at the site, though the majority are likely modern disturbance and animal burrows which contained residual prehistoric sherds. The only possible prehistoric features were two small pits (SA7/10, SA7/11), a possible hearth (SA12/6), and a small scoop or hollow (SA7/2) which contained the base of a flint-gritted pot (SA/CD) with associated burnt stones found *in situ* in the pot. The sherds from this area of the site comprise a much broader mix of vessels to those found in pit SN25, perhaps suggesting a different origin.

Excavations on PDR sites such as Broom in Bedfordshire have drawn attention to the uneven distribution of artefacts across features, even when these include a number of formally similar pits. The large assemblage from pit SN25

Class	Type	Form	Description	Quantity	Weight (g)	Vessel count by rim
Coarse	Jar	F	Jars with high, rounded shoulders and upright or out-turned necks	13	82	13
		G	Jars with high slack or weakly defined shoulders and upright, hollowed or out-turned necks	4	11	4
		E	Bipartite jars with marked or angular shoulder inward-sloping necks	7	47	3
		C	Barrel-shaped jars	2	29	2
		D	Ovoid or slightly flared jars with no distinct neck	2	12	2
		A	Jars with round bodies, no distinct shoulder and short upright or everted necks	1	5	1
		B	Ellipsoid jars with no neck	138	1,226	2
		Uncertain		18	51	14
Fine	Bowl	K	Round-bodied bowls	6	82	5
		M	Bipartite bowls with a pronounced rounded or angular shoulder and inward-sloping neck	8	38	
	Cup	R	Hemispherical cup	3	4	3
		T	Round-bodied cup with everted rim	6	14	4
		W	Tripartite cup with angular shoulder	1	1	
		F	Jars with high, rounded shoulders and upright or out-turned necks	3	19	3
	Jar	E	Bipartite jars with marked or angular shoulder inward-sloping necks	1	33	1
		Uncertain		5	29	4

Table 7.2 Quantity, weight and number of vessels by rim count of PDR vessels by vessel form

and relative absence of other large assemblages from contemporary cut features is therefore fairly typical and perhaps suggests that the pot-rich pit lay near to the original artefact source and therefore received more material (Brudenell and Cooper 2008, 14). The mixed condition of the pottery and varying sherd size suggests that the pot was already fragmented before entering pit SN25, though no especially burnt sherds were recorded. It is possible that this feature represents a midden deposit, smaller than but related to the extensive pot and artefact-rich accumulations most commonly found in southern Britain which typically produce huge quantities of fragmented pottery (Waddington *et al*. 2019, 3) and one of a number of similar, though less artefact intense, deposits beginning to be identified in eastern England (cf. Brudenell and Cooper 2008).

The remainder of the PDR assemblage was recovered from cleaning of stripped surfaces and from the enclosure ditch and other later ditches. It perhaps represents material from middens originally accumulated in pits or natural hollows in the underlying carrstone and subsequently dispersed through subsoil and later features cut through it. The sherds from these features are generally smaller (average sherd weight 5g) and more abraded than those from pit SN25, consistent with having been subjected to additional movement and attrition in transit. The only enclosure ditch contexts to produce prehistoric pottery were Layers 1 and 2 (the upper layers) in SA6/2 and SA17/2 (adjacent in trenches in the south-east part of the site) and Layer 3 in SA5/2 (on the south-west side of the site). In several cases the PDR pottery was recovered from deposits which overlay contexts containing Roman pottery, clearly showing that this was re-deposited residual material. It may not be coincidental that the direction of deep ploughing on the site was from the north-west to the south-east. Several areas of prehistoric activity, including pit SN25, are to the north-west of the part of the enclosure ditch which includes SA6 and SA17. Indeed, there is a join between two sherds from the topsoil of Trench SA7 on the south side of the site (SA/BU) and layer 2 of the enclosure ditch in Trench SA6 which lays around 100m to the east (SA/BW), again suggesting a common source for these sherds.

The assemblage contains sherds with both Later Bronze Age and Earlier Iron Age traits. The thin-walled, plain closed ellipsoid and ovoid jars with finger-textured surfaces are typical of Later Bronze Age pottery in northern East Anglia (Percival 2000, 215). Assemblages with comparable Later Bronze Age vessels have been found at Trowse with Newton and Watton Road on the Norwich Southern Bypass (Ashwin and Bates 2000, fig. 138 and fig. 175). Brudenell suggests dating for these Later Bronze Age assemblages falls around *c*. 1100–800 BC (Brudenell 2012). The angular-shouldered vessels, both plain and in limited numbers with fingertip decoration to the shoulder and rim top, the fine bowls with incised decoration, the all-over rusticated jar and haematite-coated vessels are all more typical of the Earlier Iron Age, dated 800–350 BC, and found more widely across the county. The presence of this mixed-period assemblage mimics those found elsewhere in Norfolk, for example at Trowse and other sites (Percival 2000; Brudenell 2012, table 4.4), and suggests that activity at Ken Hill may have taken place over an extended period.

The pottery has size, condition and depositional traits which suggest that it was derived from midden material. The activity which generated the material disposed of in the middens is unknown but differences in assemblage composition between the pot in pit SN25 and that found in other contexts and the lack of conjoining sherds between

SN25 and other pot from across the site suggests that different activities might have been taking place. It is also likely that the middens may have been active for some time. Large middens found in southern England have been suggested as being the focus for and remains of 'conspicuous community feasts, exchange ceremonies, and funerary and life-cycle rites' with several demonstrating comparatively long periods of activity of 500 years or more, with use extended from the Late Bronze Age on into the Iron Age (Waddington *et al.* 2019). Midden deposits at Llanmaes in the Vale of Glamorgan began around the same time as those at Snettisham, in the Later Bronze Age to Earlier Iron Age transition (Gwilt *et al.* 2016), but continued to develop throughout the Iron Age, with significant quantities of Later Iron Age and Roman pottery being incorporated and trampled into the deposit (Gwilt, Lodwick and Deacon 2006; 2016; Waddington *et al.* 2019, 13). It is possible that at Ken Hill activity which began with generation and deposition of midden material in the Later Bronze Age to Earlier Iron Age found ultimate expression with the extensive metalwork deposits of the Later Iron Age.

Bronze Age to Earlier Iron Age animal bone

Alan Pipe, Museum of London Archaeology (MOLA)

Introduction

The identifiable animal bone and mollusc shell recovered from Snettisham was quantified, identified and interpreted according to context and phase. This section presents the overall methodology, summarises the findings, and presents the Phase 2 bone (there was no animal bone from Phase 1 features). Bone and mollusc shell from other phases are covered in Chapters 8–10.

Methodology

Animal bones from each context sample group were described and recorded directly onto an Excel spreadsheet in terms of species, skeletal element, body-side, fragmentation and modification as appropriate (full spreadsheet in archive, held by the British Museum). Identifications of species and skeletal element referred to the MOLA reference collections. Modifications such as tool marks and gnawing were described using MOLA osteology codes and conventions. In general, each bone fragment was recorded as an individual database entry, either as single or multiple records, at an appropriate level of identification, 'cattle-sized' or 'sheep-sized mammal', based on size and wall thickness. Fragments assigned to the 'cattle-sized' category probably derive from cattle or horse; fragments recorded as 'sheep-sized' mammal could derive from sheep, goat, pig or dog. Measurement of a complete, fully fused cattle metatarsal from ST/DY followed von den Driesch 1976; calculation of cattle estimated stature from this bone followed von den Driesch and Boessneck (1974). Identification of the mollusc shells followed Hayward, Nelson-Smith and Shields (1996). For each context, the chronological narrative gives a description of the bone group in terms of species-composition, skeletal element and modification. Where possible, any implications for diet, disposal and activity are discussed in the chronological narrative and thematic text sections. Interpretation of evidence for burning followed Lyman (1994, 386).

Preservation, quantification, composition and modification

A summary of the animal bone is given here, and specific identifications for stratified material are included in the relevant phase discussions. Bone preservation was generally very poor throughout, with the bulk of the bone group consisting of friable, unidentifiable fragments of unidentifiable mammal bone likely to indicate the prevailing poor preservation and aggressive soil chemistry. Identifiable bone derived from cattle *Bos taurus,* sheep/goat *Ovis aries/Capra hircus*, pig *Sus scrofa*, horse *Equus caballus* and dog *Canis lupus familiaris* with three fragments of infant rabbit *Oryctolagus cuniculus* from SA/DY (Phase 6) only. There was no recovery of goat *Capra hircus,* or of fish, amphibians, game, scavenger or commensal species. Recovery of the infant rabbit is very likely to represent an *in situ* death of this burrowing species which, as a Norman introduction into the British Isles, is likely to have implications for local stratigraphy.

For the identified bone fragments, surface damage was usually sufficient to prevent measurement and to obscure or remove tool marks or any other modification. With the exception of the fragile infant rabbit bones from SA/DY, it is striking that almost all the identifiable bone assemblage derives from the most solid and robust skeletal elements (tooth, vertebra, mandible, innominate acetabulum, astragalus, phalange, metacarpal and metatarsal) and is therefore likely to be an artefact of the prevailing preservation conditions rather than a true reflection of the originally deposited faunal assemblage. Definite interpretation of the pattern of exploitation: meat diet, waste disposal and deposition, is effectively precluded beyond that the basic characteristics of the assemblage in terms of species, skeletal element, age and modification are established, although it is possible that other, less resistant, species and skeletal elements were originally present. A total of 140 at least partially identifiable fragments were recorded. Butchery marks were recorded from SN/AA (unstratified find from the wood) and ST/DN (ST35, enclosure ditch, Layer 1, Phase 5) only; white calcined bone was recorded from SN/FE (Phase 2 pit) only; there was no evidence for working, gnawing, pathological change or any other modification.

The mollusc fauna (from unstratified contexts and upper layers of Phase 4–5 features) derives entirely from occasional shells of economically important species: common/flat oyster *Ostrea edulis*, common cockle *Cerastoderma edule* and common periwinkle *Littorina littorea*, all of which are commercially harvested from suitable habitats around the East Anglian coast.

Phase 2 bone

Area 1, SN31, pit:

SN/FE Pit fill produced fragments of unidentifiable mammal bone calcined white indicating a high combustion temperature of at least 700° Celsius, equivalent to a cremation pyre or well-oxygenated hardwood fire (Lyman

Cat. no.	Museum	Ex. year	Findspot	Object name
S.1	BM	1990	Area 21	Socketed axe
S.2	BM	1990–1	Not recorded	Sword chape
S.3	NCM	2003–9	Wood	Razor
S.4	NCM	2003–9	Wood	Arrowhead
S.5	NCM	2003–9	Wood	Spearhead
S.6	NCM	2003–9	Wood	Blade fragment; ?Spearhead
S.7	NCM	2003–9	Wood	?Blade fragment
S.8	NCM	2003–9	Wood	Unidentified object fragment
S.9	NCM	2003–9	Wood	Miniature axe
S.10	NCM	2003–9	Wood	Moustache mount

Table 7.3 Phase 2 metalwork finds from the site. See catalogue in Chapter 14 for full discussion

1994, 386). There were no tool marks or any other evidence for modification. This material was radiocarbon dated to 1130–930 cal BC (at 95% probability, see **Table 5.3**).

Late Bronze Age to Earlier Iron Age metalwork

For simplicity, all metalwork from the site is presented in Part II of this volume, as the vast majority appears to originate from Phase 3 and 4 hoards. Only 10 copper alloy objects (S.1–S.10, see **Table 7.3**) may date to Phase 2 (Late Bronze Age to Earlier Iron Age). All are metal-detected stray finds. Eight were made in 2003–9, from the wooded area to the west of the 'gold field', while the others were recovered during the 1990s excavation. Axe fragment S.1 was found during detecting in Area 21, just beyond the north-east corner of the woods, while the findspot for sword chape S.2 was not recorded.

Although representing stray finds from the site, therefore with no evidence to connect them as a group other than their probable date of manufacture, this is an unusual collection of artefacts. Only the razor and socketed axe fragments can be securely dated to the Late Bronze Age or Earliest Iron Age. The socketed axe fragment is too worn for closer identification, but the Snettisham razor is of the Wiesloch type and can be assigned to the Llyn Fawr metalwork phase (*c.* 800–600 BC). These are uncommon finds with O'Connor (2007, app.2) listing only 11 sites where Wiesloch-type razors have been found in Britain, including a find from the Channel Islands. The closest parallel to the Snettisham razor comes from the multi-period Salisbury Hoard (BM 2001,0702.7; O'Connor 2007, 77) where it was deposited alongside material dating to around 200 BC (see below; Stead 1998).

Miniature socketed axes and 'moustache' mounts are both most common as unstratified stray finds (Robinson 1995; Bliss 2020; Davey 2020), and so neither object type can be closely dated within the Bronze Age and Iron Age. Bliss (2020) catalogued around 150 miniature axes from Britain. Some have been excavated from long-lived midden deposits dating to the Late Bronze Age and Early Iron Age at Whitchurch and Potterne (Bliss 2020; Waddington and Sharples 2011), and hilltop settlements and shrines dating to the Late Iron Age (Farley 2011). It is possible that most miniature axes were manufactured in the Late Bronze Age or Early Iron Age with some re-deposited at Late Iron Age and Roman period shrines (Bliss 2020, 22). So-called 'moustache' mounts are widely distributed across southern England, and some have Middle to Late Bronze Age associations (Davey 2020). Both object types appear within the multi-period Salisbury Hoard (moustache mount: BM 1998,0901.201; miniature axes: BM 1998,0901.44, 1998,0901.80: Robinson 1995; Bliss 2020), which is thought to have been deposited around 200 BC (Stead 1998). Also of interest is the association between a torc fragment and five miniature axes as well as other artefacts dating to the Late Bronze Age and Early Iron Age in a hoard from Whitchurch, Hampshire (Treasure case 2011 T152; PAS (Portable Antiquities Scheme) ID: HAMP-8A11A7; Bliss 2020, 6, fig. 3).

It is difficult to draw firm conclusions about these unusual objects, and the significance of their presence at Snettisham. As already outlined, some miniature axes have been found at Late Iron Age and Roman period sites interpreted as shrines. The presence of a razor, moustache mount and miniature axes in the Salisbury Hoard and the occurrence of miniature axes in the same hoard as a torc fragment at Whitchurch is also potentially significant. Rather than representing casual losses, these objects were probably deliberate deposits. Although chronologically the date of manufacture for several of these objects was in the Late Bronze Age or Early Iron Age, they could have been re-deposited, possibly even curated, and then deposited, sometime during the Later Iron Age or Early Roman periods.

Antler bridle cheekpiece

Julia Farley and John Davies

Material: Antler
Dimensions: Weight: 46.47g; length: 142mm; diameter: 5–21mm
Description: Bridle-bit cheekpiece made from antler tine (**Fig. 7.3**). A rectangular slot has been pierced through the centre. Two rectangular sockets have been cut part way into the inner (concave) face of the tine, towards the ends. They run perpendicular to the central slot. On either side of the two outer sockets are two lines of three circular holes, drilled at right angles into the sockets.

This would originally have been one of a pair of bridle-bit cheekpieces, serving to join the three main elements of the bridle: headpiece, mouthpiece and reins (Britnell 1976,

Figure 7.3 Late Bronze Age to Earlier Iron Age antler cheekpiece. Norwich Castle Museum, 2011.253

24, fig. 3A). The mouthpiece (either of bronze, or an organic material such as leather or rope) would have run through the central slots, joining the pair of cheekpieces and, on the outside, linking to the reins. The mouthpiece would have been held in position by Y-shaped headpiece straps on each side, with each arm of the 'Y' entering one of the partially pierced slots at the top and bottom of each cheekpiece. These headpiece straps were secured in place by wooden, bone or antler pegs, hammered through the circular holes.

Parallels

Antler cheekpieces have been recovered from many Iron Age sites, including Snailwell, Cambridgeshire (Lethbridge 1954, fig. 2); Glastonbury Lake Village, Somerset (Bulleid and Gray 1917, 440–54); Hunsbury Camp, Northamptonshire (BM 1896,0411.100–101); Auldhill, Portencross, North Ayrshire (Caldwell *et al.* 1998, 63–4); Potterne, Wiltshire (Seager Smith 2000, 230, fig. 93, nos 50–1); Denby, East Yorkshire (Rigby 2004, 172); and Viables Farm, Hampshire (Millett and Russell 1982, 82). But these are relatively simple artefacts, with fewer perforations or lacking the perpendicular arrangement of end sockets of the example from Snettisham.

Britnell (1976) identified a class of antler artefacts dating to the Bronze Age which more closely resemble the Snettisham cheekpiece. He published seven then-known examples from Britain (finds from Bledlow, Buckinghamshire; Ham Hill, Somerset; Hammersmith, London; Heathery Burn, Co. Durham; Sion Reach, Middlesex; and Washingborough, Lincolnshire). Additional similar examples have since been identified at the Late Bronze Age sites of Runnymede Bridge, Surrey (Longley 1980, 27–31) and Shinewater Marsh, East Sussex (BM 1997,1002.19). Longley (1980, 29–30) also classified this group and divided them into Class I, a distinctly British group provided with multiple peg holes on the two outermost sockets (examples from Ham Hill, Hammersmith, Sion Reach and Runnymede Bridge), and Class II (Bledlow, Heathery Burn, Washingborough, Runnymede Bridge and Shinewater Marsh), which are more varied and more closely paralleled on the continent. The find from Snettisham appears to fall into Longley's Class I.

Dating

On the continent, antler cheekpieces of this type have a long history, running back to the mid-second millennium BC (Britnell 1976, 28). British examples appear to date somewhat later. At Runnymede and Heathery Burn, the antler cheekpieces were found in association with Ewart Park-period metalwork, and Class I antler types are paralleled in metal bridle-bits from the Llyn Fawr period (Longley 1980, 30).

Conclusion

Taken together, this evidence suggests a likely date range around 800–600 BC for the Class I Snettisham example.

Discussion

There is little evidence for Late Neolithic or Early Bronze Age activity at Snettisham, despite the presence of a small number of Beaker sherds. However, the site seems to have taken on a special significance in the Late Bronze Age to Earlier Iron Age (*c.* 1100–350 BC).

There was clearly substantial Late Bronze Age depositional activity in the vicinity of the site, with at least five known Late Bronze Age hoards from the surrounding area of Snettisham and Shernborne parishes (Lawson 2018; NHER 1504, 1670, 1671, 1672, 1679, 17665, 25920, 28136; Treasure case 2006 T441, the latter found in the area of the site itself).

The small number of surviving features does not allow a detailed reconstruction of the nature of the Phase 2 activity at Snettisham. The majority of ceramics from this period were recovered from pit SN25 (to the east of the metalwork hoards) and Trenches 7 and 12 (immediately to the south). The latter had been heavily disturbed by animal burrowing and other recent activity; the only possible *in situ* deposits of Phase 2 material were two small pits (SA7/10, SA7/11), a possible hearth (SA12/6), and a small scoop or hollow (SA7/2) which contained the base of a flint-gritted pot with associated burnt stones.

Pit SN25 contained a large quantity of pottery, with larger sherds than elsewhere, including at least three fine bowls, and there are several cases of conjoining sherds from throughout the pit. Together, this suggests that the material was probably deposited in a single episode in the Earlier Iron Age, or derived from a single source. Percival (above) suggests that the material may represent a midden deposit from an event associated with food consumption.

The pits and burrows in Trenches 7 and 12 contained sherds representing a broader mix of vessel types to pit SN25, suggesting a different origin. This was a mixed-period assemblage encompassing the Late Bronze Age to Earlier Iron Age (*c.* 1100–350 BC), suggesting that activity may have taken place over an extended period of time. Percival (above) suggests that the composition of the assemblage implies midden material. Although the nature of the activity which generated these deposits cannot be ascertained with certainty, it is possible that it was associated with communal gatherings or feasting activities. The small number of non-

ceramic finds from Ken Hill that can be securely dated to Phase 2 (the antler cheekpiece (see above), and metal finds S.1–S.10, where the findspot was record) are from the vicinity of the wooded area to the west, suggesting that activity in this period may have been concentrated away from the hoard field. The high levels of phosphate in the woods (Ch. 5) indicate an area of intensive activity or occupation over about 4,000m^2. This may be related to the Phase 2 midden-generating activity, although it is equally possible that it could be associated with the nearby Phase 4 Romano-Celtic temple (Ch. 9).

Although the evidence from Snettisham is on a much smaller scale, Percival draws parallels with large midden sites in south-central England (Waddington *et al.* 2019). Such long-lived Late Bronze Age to Early Iron Age midden sites are rare in eastern England, but Grandcourt Farm, Norfolk (Malone 2010), has a large number of pits with extensive evidence for Middle Iron Age structured deposits of pottery, brooches, amber, glass and shale, and may represent comparable activity in the vicinity of Snettisham (it lies around 18km to the south). Hargrave (2018, 154–5) argues that the depositional activity at Grandcourt Farm may be a forerunner to Snettisham, or at least 'a precursor to the general resurgence of metalwork deposition' in this part of north-west Norfolk in the Later Iron Age.

Chapter 8
Phase 3: Later Iron Age (*c.* 350–60 BC)

Julia Farley and Jody Joy, with contributions by Sarah Percival and Michael de Bootman

Phase 3 is the most intense period of depositional activity at Snettisham, including the burial of the bulk of the metalwork hoards, and all those containing torcs. Aside from the hoard pits themselves, there are no other features which can be securely attributed to this phase, although it is likely that the field system revealed through geophysical survey in 2006–9 (see Ch. 5 and **Fig. 8.2a–b**) was contemporary with the hoards.

A summary of the Phase 3 evidence is given in this chapter, alongside the short specialist report on the small quantity of Late Iron Age pottery from the BM excavations. The detailed stratigraphic information and the Phase 3 metalwork and coin catalogues are presented in Part II of this volume, which focuses exclusively on the Later Iron Age (Phase 3) and Early Roman (Phase 4) hoards.

Later Iron Age features

Table 8.1 lists the Phase 3 features from the 1990–2 excavations: torc hoards F, G, H, J, K, L and scattered coin hoard N. The torc hoards recovered in the 1940s–50s (A, B, C, D and E) also fall into this phase, and all the Phase 3 hoard findspots are shown in **Figure 8.1**. Most of the hoards were located in a fairly restricted area in the 'gold field'. Torc hoards B, C, D, E, G, H and J are all distributed in an area around 30–40m in diameter, with K just to the west, L and N 50–70m to the south, and F and A further east. A is the most isolated of the known hoards, around 70m from the main concentration.

The 'gold field' is situated on the lower slopes of the promontory of Ken Hill, a conspicuous feature in an otherwise low-lying landscape, which in the Iron Age would have reached out into the Wash. The hoard field itself is a plateau around 35m above sea level while, beyond, the southern terminal of Ken Hill rises up to a height of 42m. The hoard field is located on the sheltered inland side of the hill, sloping down towards what would have been an inlet from the Wash.

Hoards A to E were recovered during ploughing in the 1948–50, with additional finds made during subsequent excavations by Rainbird Clarke (Clarke 1954; Ch. 4). Hoard F was discovered by Charles Hodder whilst metal-detecting in August 1990, and it was this discovery which triggered the BM excavations. A narrative account of the excavation of the hoards is given by Stead (Ch. 2), and further excavation details are given in Part II of this volume.

The excavation methodology is described in Chapter 5. In summary, after Hoard F was recovered and recorded, a box scraper was brought onto site and used to strip the soil in

Table 8.1 Phase 3 features excavated 1990–2

Ex. year	Area	Feature	Type
1990	Area 4	Hoard F pit	Pit
1990	Area 1	Hoard G pit	Pit
1990	Area 1	Hoard H pit	Pit
1990	Area 2	Hoard J pit	Pit
1990	Area 6	Hoard K pit	Pit
1990	Area 9	Hoard L pit	Pit
1991	Area 18	Hoard N	Coin scatter

Figure 8.1 Location of Phase 3 features (Hoards A–L and N)

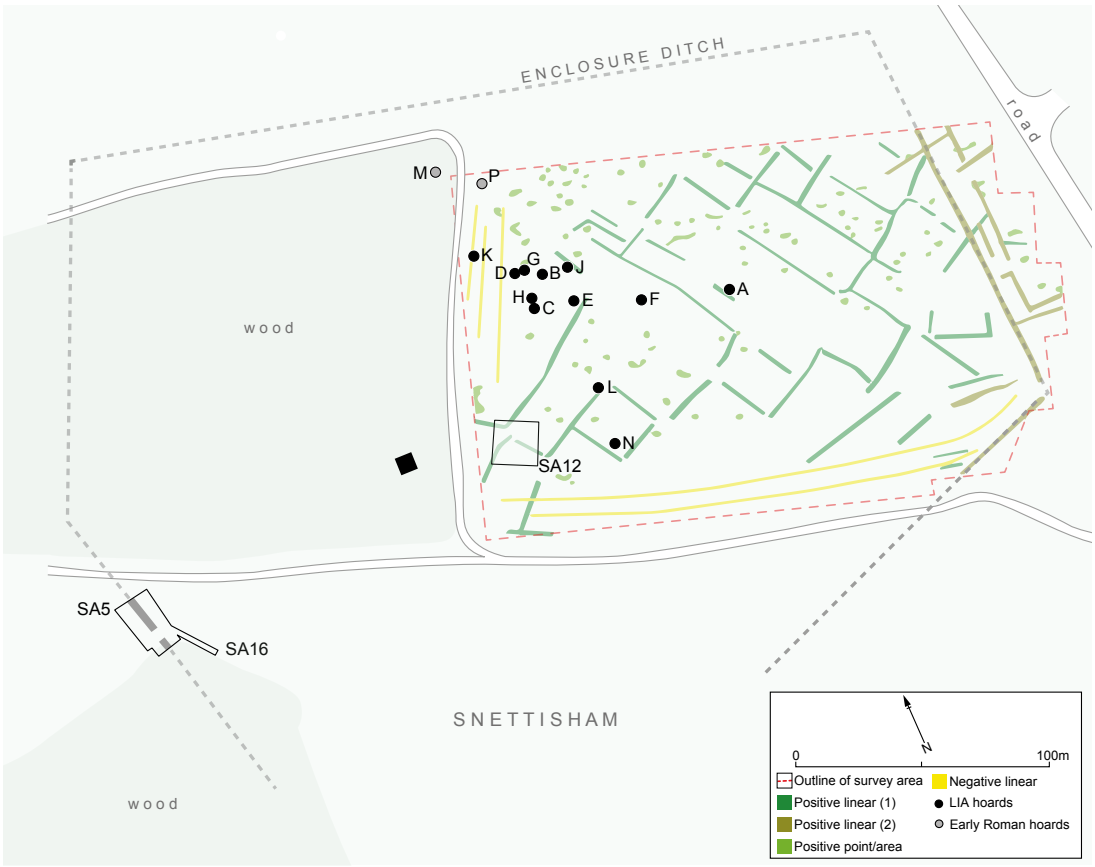
shallow spits. The sequence of stripping is shown in **Figure 1.4**. The first stripped areas were in the vicinity of known hoards, beginning with B and D, and the stripped area was gradually expanded to cover more of the field. This process was monitored by archaeologists, who also examined soil as it was deposited on the spoil heap. Hodder and Tony Pacitto used metal-detectors to scan the stripped surface, flagging any anomalies so that they could be investigated by the archaeologists. In this way, Hoards G to L were located; the coins forming Hoard N were also recovered by detecting. The hoard pits were excavated by hand, with the sequence of torcs carefully recorded as they were exposed and lifted (see Ch. 12).

Dating the hoards

Dating of the hoards (discussed more fully in Part II) is not straightforward. The majority of the Phase 3 hoards (A, D, G, H, J, K and L) contained only torcs and other ornaments/metalwork such as wrought rings of various sizes. Hoards B, C, E and F were torc hoards which also included coinage, and Hoard N was a dispersed coin hoard. The dating of the coins from Hoards B, C, E, F and N supports the idea that these hoards were more or less contemporary (Ch. 15). Hoard C contained potins, while the Hoard B, E, F and N coins are gold issues (F and N are Gallo-Belgic gold, B predominantly Gallo-Belgic gold with one insular gold quarter stater, and E a single insular gold quarter stater). The latest potins in Hoard C are dated by Holman (2016; Ch. 15) to *c.* 75/70–60/55 BC, with the composition of the assemblage suggesting that the hoard was deposited around 60 BC or shortly thereafter. The gold coins from Hoards B, E, F and N terminate with issues minted *c.* 80–60 BC (though note that some of these coins are relatively worn, and Sills tentatively dates the two insular gold issues from Hoards B and E to the period *c.* 60–50 BC, see Ch. 15). Gallo-Belgic E coins (the predominant gold coinage in circulation *c.* 60–50 BC) are, notably, absent from the hoards.

Organic material from two torcs was used to provide radiocarbon dates (**Table 5.2**; Garrow *et al.* 2009). The organic core (see Chs 17, 19) from one Hoard F torc fragment gave a date of 370–120 cal BC (at 95% probability). Given the associated coinage from Hoard F, some of the objects in the hoard were most likely over a century old at the time of burial. Likewise, two samples from an organic repair to torc L.6 were dated. One gave a surprisingly early date of 780–510 cal BC (at 95% probability), most likely an error, possibly due to conservation treatments (Garrow *et al.* 2009, 95). The other date (from an untreated fragment) was closely in line with the Hoard F sample, at 360–110 cal BC (at 95% probability). However, it is likely that the heavily repaired torc L.6 (like other very worn and damaged examples from Hoard L) was one of the older pieces in the hoard.

As no objects from the torc hoards can be securely dated to after *c.* 60 BC, this is taken as a likely terminal date for their deposition (see Ch. 22), and so for Phase 3. It is more difficult to establish the beginning of this phase. In terms of the types and styles of torcs represented, it is not possible to order the hoards chronologically. Aside from Hoard A, which contained exclusively large tubular torcs, the range of



a)

b)

Figure 8.2a–b Interpretation of processed results from fluxgate gradiometer survey in relation to (a) excavated features across the site including the entrance through to the enclosure ditch; (b) the hoard findspots

torcs contained within each hoard is broadly similar, and it is clear that many torcs were in circulation for a long time, perhaps many generations, before deposition (Ch. 20). Thus, the hoards could have been buried en masse over a relatively short length of time, or gradually over a much longer period. There could even have been decades between some of these deposits. Here, a date of *c.* 350 BC is cautiously offered as an indication of the earliest possible date of deposition for the hoards which cannot be given a *terminus post quem* through coinage (A, D, G, H, J, K and L), given the two radiocarbon dates of 370–110 cal BC for torcs with organic cores. Whilst gold and silver alloy torcs from Britain are generally stylistically dated to the 1st century BC (Ch. 22), it is likely, based on the radiocarbon dates from Snettisham and more recent finds such as the torc hoard from Leekfrith, Staffordshire (Farley *et al.* 2018) that such ornaments could well have been in production, use and circulation significantly earlier. However, the clustering of the latest dates for hoard coins in the mid-1st century BC (Hoards B, C, E, F and N) strongly suggests at the very least a peak of deposition at this time, even if some of the non-coin hoards could theoretically have been deposited significantly earlier. Whilst a cautious date range is given in this chapter for this phase of activity, the editors of this volume would advocate for a relatively narrow window of decades or even years for the deposition of the torc hoards, around or shortly after 60 BC.

Late Iron Age pottery

Sarah Percival

This section presents the Phase 3 pottery. For Methodology, see Chapter 6.

A small assemblage of 63 sherds of Late Iron Age pottery weighing 478g were collected, mostly as single or small numbers of sherds dispersed through unstratified contexts and a modern ditch (SA/HP, SA/HQ, SA/JK and SN/RD). A larger dump of 57 sherds, 389g, all from a single vessel in flint-tempered fabric, was recovered from Layer 1, the topmost fill of the Roman enclosure ditch (SA/BX). No diagnostic sherds survive. The small size of the sherds, which have a mean sherd weight of 6g, and the highly abraded condition suggest that they are re-deposited.

The only Phase 3 context to produce pottery was the fill of the Hoard K pit, which contained a small sherd of Earlier Iron Age pottery (SN/LH, 3g), almost certainly residual in this context.

The later prehistoric field system

Julia Farley, Jody Joy and Michael de Bootman

Geophysical survey carried out at Snettisham in 2006–9 (see Ch. 5) revealed a field system that may be contemporary with the Late Iron Age hoards. This is most likely part of a wider agricultural landscape; aerial photography and geophysical survey has identified cropmarks representing extensive systems of fields, droveways and enclosures along the area of the north-west Norfolk coast from Heacham to Dersingham (see **Fig. 3.7**). These farmsteads occupied the greensand belt, between the 10m and 35m OD contours, with the land sloping down towards the saltmarshes and fenland to the west, and rising up towards a chalk ridge in the east (Massey *et al.* 2003, 339; Brennand 2004). Massey *et al.* (*ibid.*) propose that the east–west droveways may have provided seasonal transhumance routes for moving stock between the uplands and the saltmarsh.

Most of these field systems have not been excavated, and so they remain hard to date, although they are generally assumed to be later prehistoric or early Roman. In the nearby Ingol valley, just to the south of Ken Hill, excavation of a similar field system revealed a Roman settlement with several phases of occupation and industrial activity, spanning from at least the 1st to 3rd centuries AD (Flitcroft 2001).

At Snettisham, some of the field system linears may have been encountered in Trench 12 in the 1992 excavations (see Ch. 5, **Fig. 5.11**), but no dateable material was found and they were interpreted at the time as natural features. Although geophysical survey was carried out in 1990–2, the technology available at the time was not sufficient to detect the features revealed in 2006–9, and thus the excavation team had little information to go on. Nevertheless, the work of de Bootman (Ch. 5) suggests that the field system is cut by the enclosure ditch which partially surrounds the area containing the hoards. Pottery finds from the BM 1990–2 excavations suggest that this ditch had begun to silt up from the mid-1st century to mid-2nd century AD, and there is no evidence that it was constructed significantly earlier (Ch. 9). Thus, the underlying field system most likely pre-dates the enclosure of the hoard field. It could be contemporary with Iron Age activity at the site, or even the Late Iron Age depositional activity. Overlaying de Bootman's geophysical survey data from the 'gold field' (Ch. 5) with the findspots of the Late Iron Age torc hoards (**Fig. 8.2a**) certainly suggests the tantalising possibility that the two may be contemporary, with the hoard findspots seeming to relate to the field system. Hoards B, C, D, E, G, H, K and J all appear to be contained within one rectilinear enclosure, clustered near the eastern corner (and possible entrance) to this defined area. Hoard F lies just to the east, around 20m beyond this possible entrance. Hoard A, around 30m east of Hoard F, and in a different enclosure, seems to be associated with a small linear feature. Hoards L and N appear at the north and south corners of a small square enclosed area just to the south of the main depositional area.

The field system may also have channelled movement across the site (**Fig. 8.2b**). Whilst we know very little about the way in which depositional activity and movement around the site was structured in the Late Iron Age (Phase 3), we can make some suggestions for the Early Roman period (Phase 4) (see **Fig. 8.2b**). The location of the entrance to the Phase 4 enclosure ditch and the siting of the possible Roman-Celtic temple structure indicate that people accessing the hoard field might have moved across the site from west to east, coming through the western entrance through the enclosure ditch and passing the square stone structure on their left. This route would lead straight to what appears to be a narrow entrance way in the field system (overlain by Trench SA12). This leads into the open area containing Hoard F. The small square enclosure containing Hoards L and N lies just to the right, and the enclosure containing most of the hoards is on the left. It is now hard to say whether this area, potentially a sacred precinct, extended further west or contained other features such as a shrine or grove.

Discussion

The most spectacular finds from the site date to the Later Iron Age, Phase 3 (*c.* 350–60 BC), the period which saw the deposition of the torc and coin hoards A, B, C, D, E, F, G, H, J, K, L and N. It is notable that some of these objects were ancient when they were deposited, their use perhaps even stretching back as far as the activities which led to the deposits of midden material at the site during Phase 2.

Aside from the hoard pits, no other features can be assigned to this period. The stray finds of metalwork and coins which date to this phase (see Part II, Chs 14–15) probably predominantly derive from hoard material dispersed by ploughing, other agricultural activity or animal burrowing.

The small quantities of Late Iron Age ceramics from the site are not sufficient to suggest any significant settlement activity, though it is likely that the enclosure or field system is contemporary with the Phase 3 hoards. Ken Hill was probably chosen as the location for these deposits due at least in part to its presence as a conspicuous natural feature in the landscape, perhaps one which had already become a focus for special activities in the Late Bronze Age and Earlier Iron Age (Phase 2, Ch. 7).

Whilst there are no hoards or features that can be securely dated to the second half of the first century BC, it is likely that depositional activity continued, albeit on a much smaller scale, between Phases 3 and 4. The analysis of stray finds of coins from the site (discussed in Ch. 15) suggests deposits of single coins and small hoards of local coinage over an extended period, with a slight peak around 10 BC, coinciding with the end of Norfolk Wolf B stater production (Talbot 2017, 100) and a wider peak in coin hoarding in East Anglia. The next major period of activity at the site falls in the 1st century AD.

Chapter 9
Phase 4: Latest Iron Age/ Early Roman (*c.* AD 1–200) and Phase 5: Late Roman (*c.* AD 350–400)

Julia Farley and Jody Joy, with contributions by Alice Lyons, Paul Craddock, Janet Lang, Caroline Cartwright and Alan Pipe

There was extensive activity at Snettisham in the Roman period, attested through both excavated features and stray finds. For the purposes of this volume, this is divided into two phases: Phase 4 comprises the Latest Iron Age and Early Roman period (*c.* AD 1–200), while Phase 5 falls in the Late Roman period (*c.* AD 350–400), when it seems that there was a significant change in the use of the site.

Phase 4 saw the deposition of two hoards: ingot hoard M (dated through radiocarbon dating) and the lost coin hoard P, dated through reconstruction of the coin composition. The activities identified through excavation which most likely fall into this phase are the digging of the large, polygonal, V-shaped ditch which partially encloses the 'gold field', and the construction of the stone-footed rectilinear structure in the wooded area to the west of hoards, excavated by Hutcheson in 2004 (Hutcheson 2011). The silting of the enclosure ditch is dated through analysis of the ceramic assemblage and radiocarbon dating of stratified bone, while the construction of the stone building is dated to the Romano-British period on the basis of analysis of the finds, which include coins and pottery.

Phase 5 saw the destruction of the stone structure (dated through a Late Roman coin found in a sealed destruction layer beneath a collapsed section of the wall) and the deliberate infilling of a stretch of the northern section of the enclosure ditch (dated through ceramic finds and radiocarbon dating of associated bone and charcoal).

This chapter presents detailed stratigraphic information on Phase 4–5 features from the 1990–2 BM excavations and summarises the results of the 2004 excavations in the wooded area to the west. It also includes specialist reports on finds from the BM excavation: Roman pottery, Roman ceramic building material, debris from iron production, the charcoal and animal bone from the enclosure ditch, and two shale objects that may date to the Romano-British period.

While short summaries of the two Phase 4 hoards are included below, the detailed catalogue entries for Roman-period metalwork and coins (both hoard and stray finds) are presented in Part II of this volume, which focuses on the Late Iron Age and Early Roman hoards.

Latest Iron Age and Roman features

Table 9.1 details the Phase 4–5 features excavated in 1990–2. **Figure 9.1** shows the location of these features on the site, alongside the Romano-British stone structure identified by Hutcheson (2011) during excavations in 2004 (plan shown in **Fig. 9.2**).

The Phase 4 hoards

Two hoards (M and P) date to Phase 4. Both were discovered by detectorists between the first and second seasons of the BM excavations (1990–1).

Hoard M, a group of six amorphous silver-copper alloy ingots, was found by Charles Hodder in March 1991, beneath a tree in the north-east corner of the wood. He reported the find to the BM team, but subsequent excavation of the findspot revealed no context for the hoard, nor any further finds. It is possible that they had been found in the field some time previously and re-deposited next to the tree. Charcoal lumps embedded in the ingots were

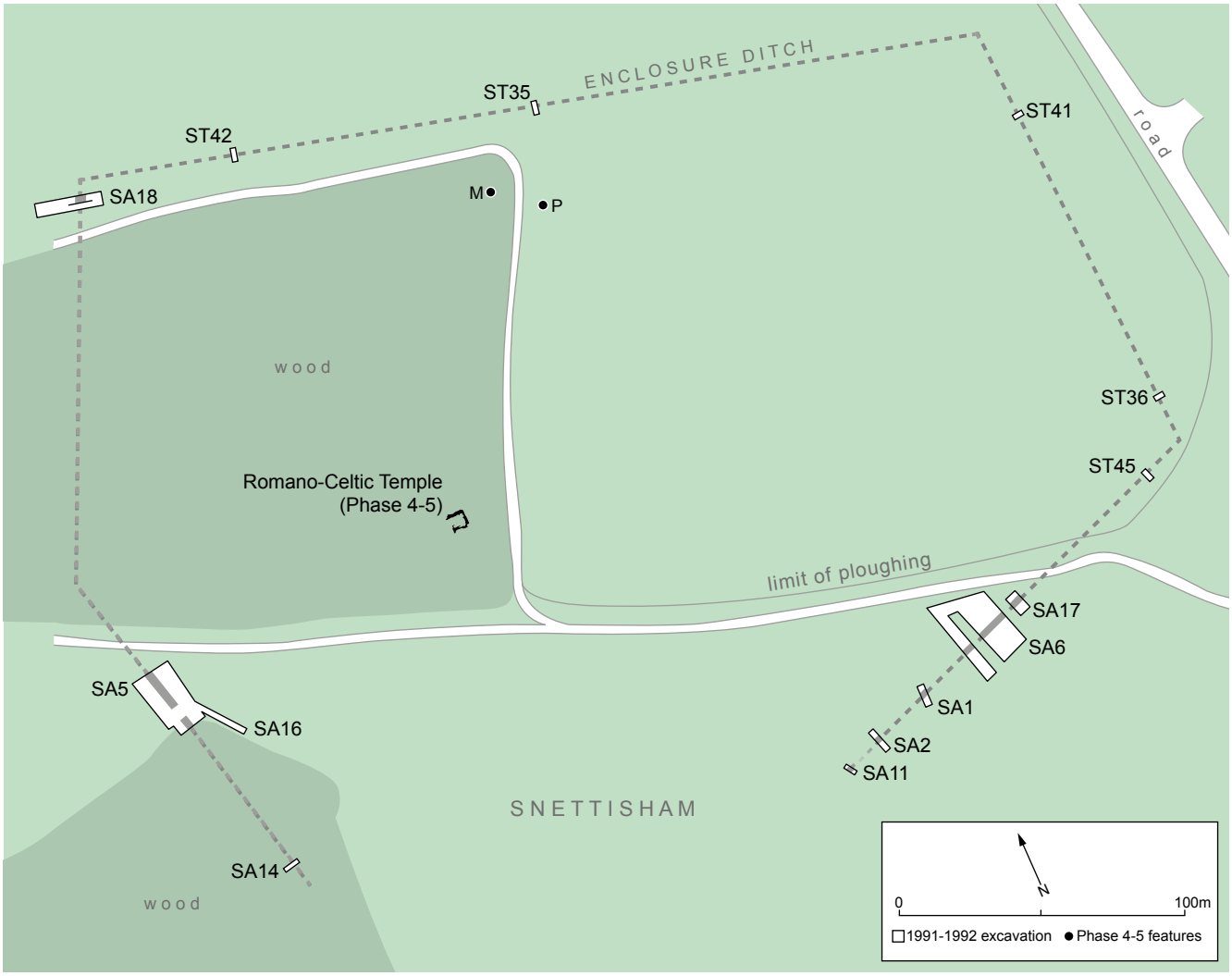


Figure 9.1 Plan showing location of Phase 4–5 features

Ex. year	Area	Feature	Type	Phase
1991	Wood	Hoard M	Metal-detector findspot	4
1990	?Area 21	Hoard P	Postulated metal-detector findspot	4
1991	Area 20	ST36	Enclosure ditch	4
1991	N/A	ST41	Enclosure ditch	4
1991	N/A	ST42	Enclosure ditch	4
1991	Area 20	ST45	Enclosure ditch	4
1992	Trench 1	SA1/2	Enclosure ditch	4
1992	Trench 2	SA2/2	Enclosure ditch	4
1992	Trench 5	SA5/2	Enclosure ditch	4
1992	Trench 6	SA6/2	Enclosure ditch	4
1992	Trench 11	SA11/2	Enclosure ditch	4
1992	Trench 17	SA17/2	Enclosure ditch	4
1992	Trench 18	SA18/2	Enclosure ditch	4
1992	Trench 14	SA14/2	?Enclosure ditch	?4
1991	Area 21	ST35	Enclosure ditch	4/5

Table 9.1 Phase 4–5 features from the 1990–2 excavations

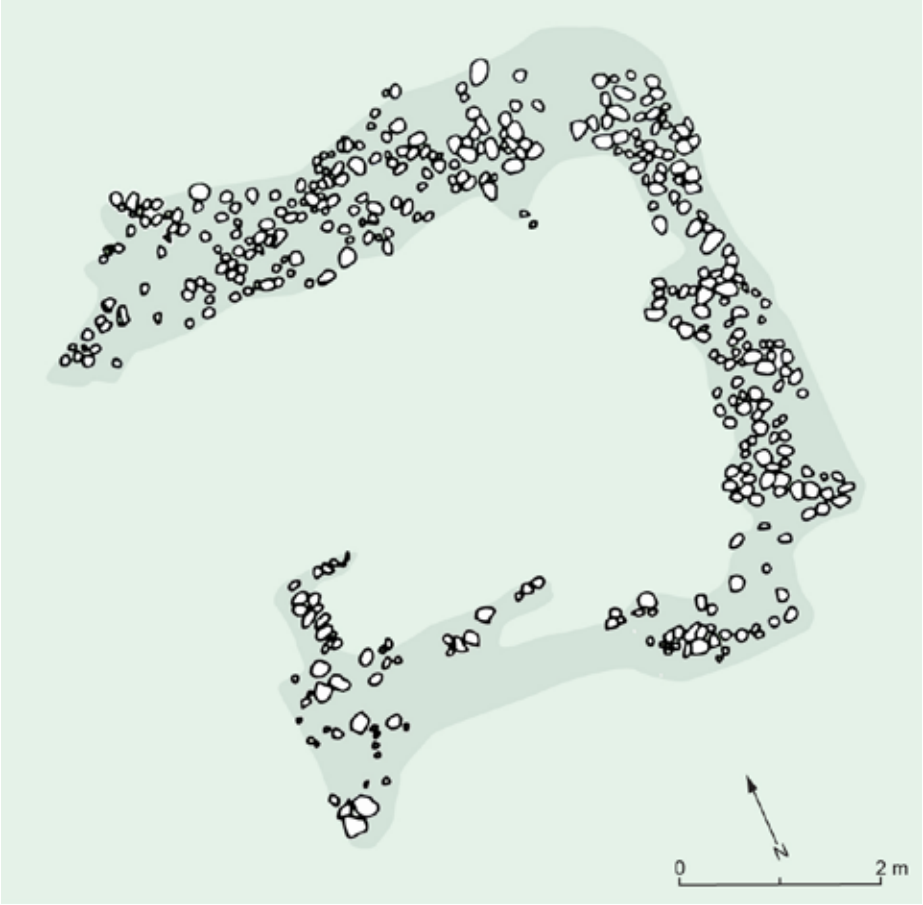


Figure 9.2 Plan of the square structure in the wood, after Hutcheson 2011

radiocarbon dated (**Table 5.2**; Garrow *et al.* 2009), giving a calibrated radiocarbon date of 20–210 cal AD (at 95% probability), with the bulk of the probability lying within the range 30–130 cal AD (at 68% confidence). It should be noted that the charcoal sampled was old alder wood, so the actual date of the hoard is likely to be somewhat later. Here it is assigned to Phase 4 (*c.* AD 1–200).

Hoard P, around 6,000 Iron Age silver coins buried in a silver bowl, along with other objects including precious metal ingots, was stolen by illicit detectorists operating on the site without permission. Stead (Ch. 2) suggests that it was located under the spoil heap of the 1990 excavations, in the north-west corner of the hoard field. Fragments from a silver vessel (P.1–7) were recovered from this area in 1991 when it was stripped in advance of archaeological excavation, most likely the last remnants of the hoard. Based on reconstruction of the coin assemblage from Celtic Coin Index records and contemporary sales catalogues (Ch. 15, Chadburn 2006; de Jersey 2014, no. 196.6; Talbot 2017, 223–4), it consisted predominantly of local silver issues, and was most likely deposited in the mid-1st century AD, probably around AD 60.

The full details of these hoard finds are given with the metalwork and coin catalogues in Part II of this volume.

Other features

Aside from the hoard findspots, there are two other archaeological features which likely date to Phases 4–5: the small rectilinear structure excavated by Hutcheson in 2004, and the enclosure ditch uncovered by Stead's excavations (Ch. 2).

Rectilinear structure

Excavations were carried out in the south-west corner of the wooded area just to the west of the 'gold field' in 2004 by Natasha Hutcheson, after metal detectorists surveying the site with permission of the landowner revealed the footings of a stone wall. Site conditions were extremely challenging, largely due to the extent of tree cover. An area of approximately 8 x 8m was cleared, revealing the outline of a square stone structure, *c.* 6 x 6m (**Fig. 9.2**, Hutcheson 2011). This small building was located directly opposite the entranceway to the polygonal enclosure (**Fig. 9.1**). Test pitting revealed no obvious stratigraphy within the interior. Trenches were opened to investigate the exterior of the structure, and two slots were dug across the walls. These revealed 'a shallow Carstone foundation built onto the natural Carstone geology' (*ibid.*, 43). Hutcheson proposed that the upper parts of the walls were most likely wooden.

Given the small scale of the excavation, a relatively large quantity of finds was recovered. This included an assemblage of small and abraded pottery sherds covering the period from the 3rd century BC to 3rd century AD (with a notable absence of Late Roman finewares), nine Iron Age and Roman coins, two small gold alloy lumps, animal bone and oyster shell. Structural debris included *tesserae*, fragments of dark-purple painted wall plaster, roof tiles, lumps of mortar, and other likely Romano-British-period ceramic building materials. Romano-British *tegulae* and a fragment of flue tile were also recovered from the wood as stray finds during the 1990–2 and earlier excavations (Chs 2, 4 and see below), supporting the idea that there was a structure in the vicinity.

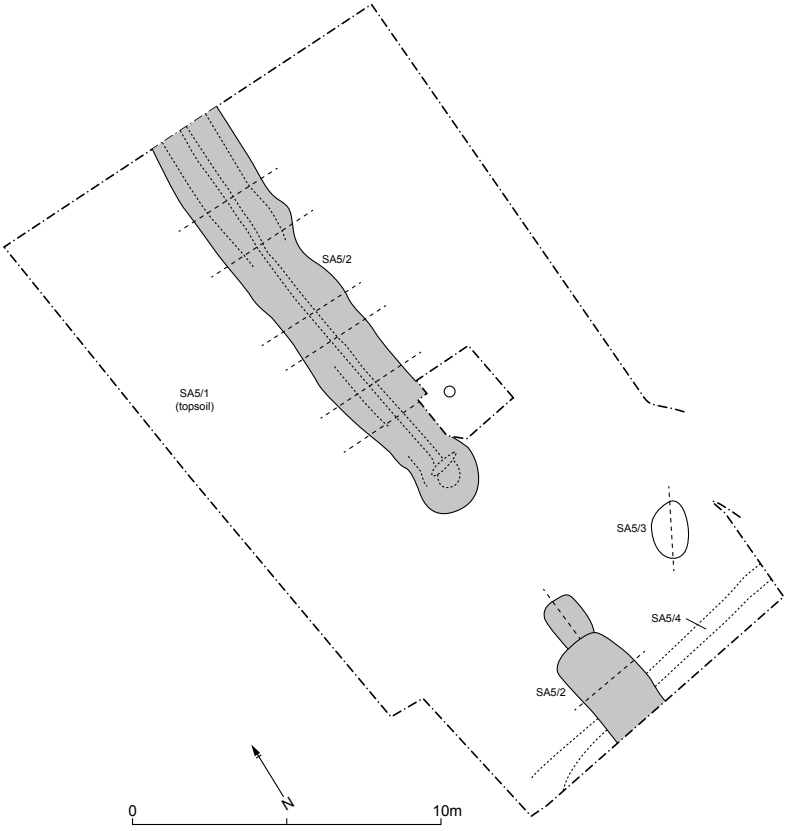


Figure 9.3 (above) Plan of the enclosure ditch entranceway in Trench 5

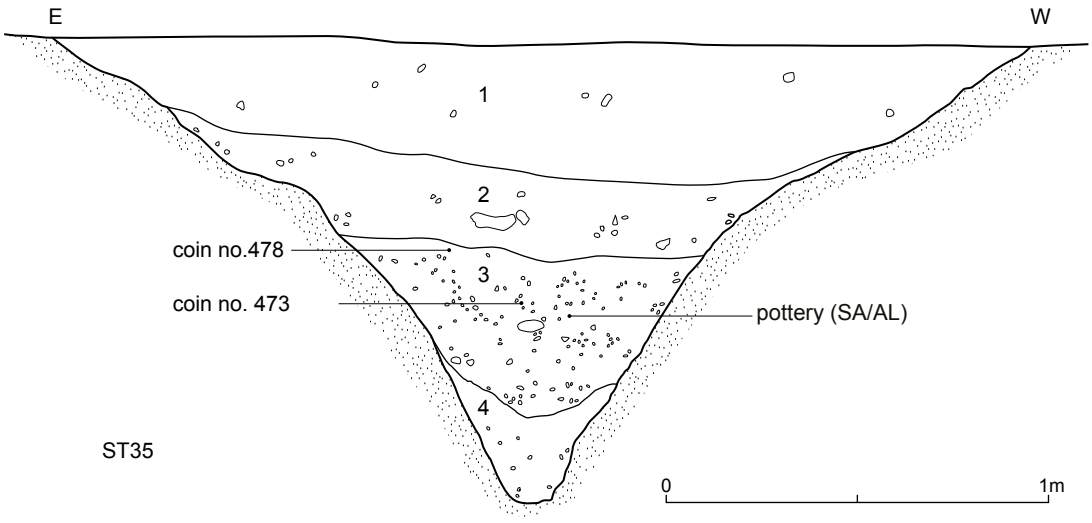
Figure 9.4 (right) Aerial view of the enclosure ditch entrance in Trench 5, looking south

Hutcheson (2011, 45) interpreted the square building as a Romano-Celtic temple with 'mosaic floor, painted plaster walls and a tiled roof'. Beyond the broad Romano-British date suggested by the structural evidence, the date of construction cannot be ascertained with certainty. However, the excavations uncovered a Late Roman coin dating to *c.* AD 350–360 under tumble from the north wall of the structure, providing a *terminus post quem* for the destruction of the building (Hutcheson 2011, 44). She posited that the structure might have been deliberately destroyed in the later 4th century, and it certainly appears that changes were taking place at the site around this time (see below).

The enclosure ditch

The main archaeological feature from Phases 4–5, uncovered in 1991–2, is the polygonal enclosure ditch which partially surrounds the hoard field on three sides (to the west, north and east, **Fig. 9.1**). The relevant trenches, slots and areas are listed in **Table 9.1**. The only entrance discovered was in Trench 5, in the south-west corner of the site (**Figs 9.3–4**). Despite attempts to uncover any southern side to the ditch, none could be located. On the south-west side, the ditch continued past the entrance and was seemingly identified in Trench 14 (though with a very different, shallower profile, see bottom right image in **Fig.**

Figure 9.5a Section through the enclosure ditch SA5/2



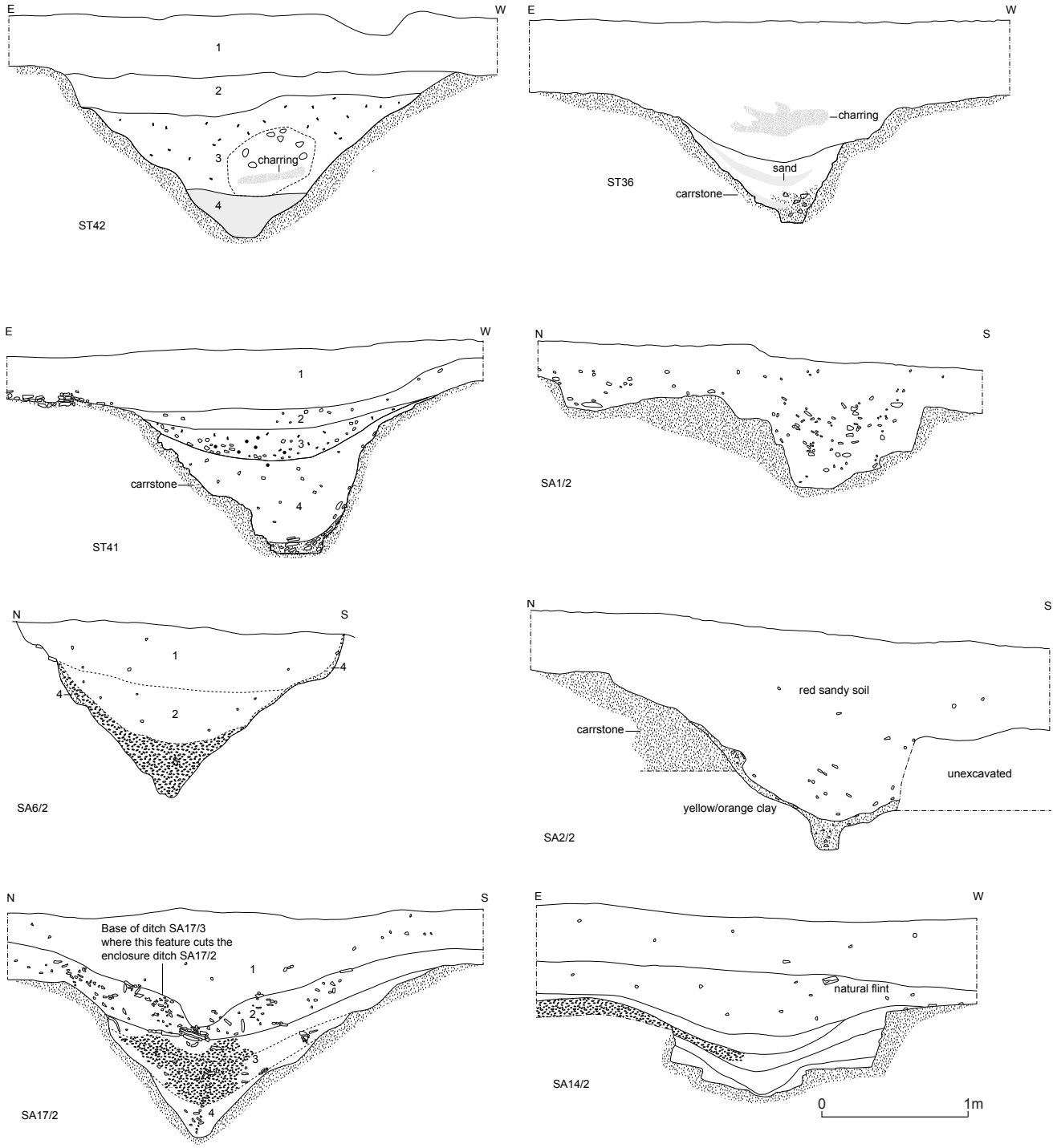


Figure 9.5b Sections through the enclosure ditch: ST36, ST41, ST42, SA1/2, SA2/2, SA6/2, SA17/2 and SA14/2

9.5b). It appeared to peter out around the edge of the carrstone, ending at the springline. To the south-east, the ditch extended downhill beyond the plateau, rather than following the contour line. Its terminus could not be precisely located, but most likely lay under a poplar tree directly between Trenches 11 and 19. All the evidence suggests that in antiquity the south side of the enclosure was open or bounded by a natural barrier (such as trees or hedges) which have left no archaeological trace. On this side, the land slopes down towards what would have been marshland, bordering an inlet from the Wash.

The enclosure ditch was about 2.3–2.8m wide at the base of the plough soil, and 1.5–1.8m below the present ground surface, cut around 1.2–1.4m deep into the carrstone. In most areas the ditch had a steep-sided, V-shaped profile with a narrow, flat channel at the bottom (**Fig. 9.5a–b**). **Figure 9.3** shows a plan of the entranceway in Trench 5, and a photograph is shown in **Figure 9.4**. A large area was stripped of topsoil, but there was no evidence of any gateway structure, post holes or a palisade trench, nor any metalling or wheel ruts in the 6m-wide causeway between the terminals of the ditch.

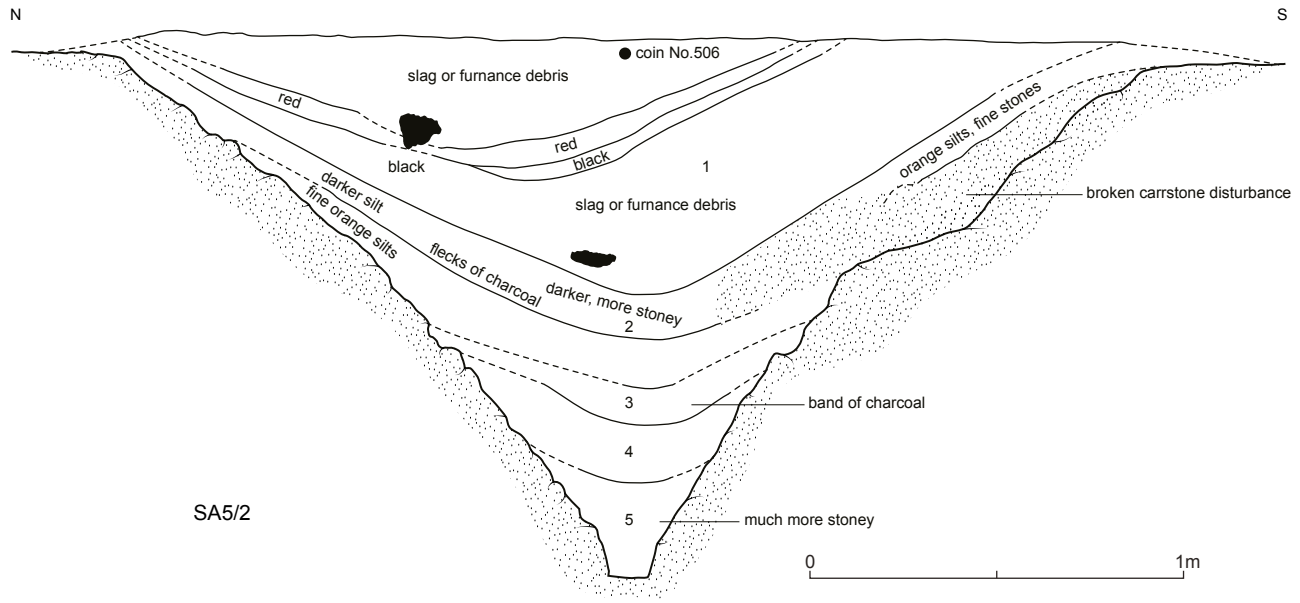


Figure 9.6 Section through the enclosure ditch at ST35

The function of the form of the deep, V-cut ditch is unclear. There is no surviving evidence for structures or a palisade, though it is possible that plants or light wooden structures could have been used to create a more imposing barrier. No surviving bank material was uncovered anywhere around the circumference, except in Trench 17. Here, the east section through the enclosure ditch (**Fig. 9.5b**) showed that in Layer 2 (see below) it had been infilled with quite large pieces of carrstone, perhaps from the levelling of a bank, in which case the bank must have been on the inside of the ditch. Otherwise, in most areas the sequence of silting and infilling seems to have been similar around the circuit.

Dating the enclosure ditch

Figure 9.5a–b shows sections through the enclosure ditch. Most areas, including trenches ST41, ST42, SA5, SA6 and SA17 (see **Fig. 9.5a** and left-hand side of **Fig. 9.5b**), were interpreted on-site as showing a sequence of four fills:

- Layer 1: Upper fill of reddish sandy soil with few pebbles. Roots often present
- Layer 2: Sandy soil with a higher frequency of stones, in some areas intermixed with grey or yellow sand
- Layer 3: Gravelly and coarse sandy fill
- Layer 4: Primary silting of the ditch: sandy, lighter in colour, few stones.

Towards the ends of the identified run of the ditch on the south side of the site, and in the south-east corner of the enclosure (Trenches ST36, ST45, SA1, SA2 and SA14), a shallower and simpler profile was recognised (right-hand-side of **Fig. 9.5b**). Only one other section, ST35 (**Fig. 9.6**), showed a significantly different pattern in the upper fill. The layers observed in ST35 were:

- Layer 1: Compact upper fill of slag and furnace debris, with lenses of charcoal
- Layer 2: Dark silty soil, stony, with flecks of charcoal, thin layer of fine orange silt at base. Carrstone rubble on the south side may be the remains of a slumped or levelled bank
- Layer 3: Gravelly and coarse dark sandy fill, no finds
- Layer 4: Primary silting of the ditch: orange sand, very few stones, Roman pot sherds ST/GE at the top of this layer
- Layer 5: Stony rubble, perhaps natural decayed carrstone.

Whilst ST35 Layers 3 and 4 are similar to those observed elsewhere, the unusual nature of Layers 1 and 2 suggest that in this area there was a phase of deliberate infilling towards the end of the Roman period (see below).

Table 9.2 lists finds from the enclosure ditch by layer (where this was recorded – the layer was not recorded for finds from ST45 and Trenches 1, 14 and 18 where, as discussed above, the stratigraphy was notably simpler). Where possible, stratified animal bone or charcoal was radiocarbon dated (see below and **Table 5.3**); a brief overview of the results is given in **Table 9.3**.

Residual flint occurred throughout. The only other find type from the primary silting (Layer 4) was a small quantity of Roman pottery (see below for full discussion). Some are types which cannot be closely dated within the Roman period (SA/AY; ST/FY). All of those which can be more closely dated are from the later 1st to mid-2nd century: ST/GE (*c.* AD 70–120); SA/BQ (*c.* AD 65–85); SA/BM (*c.* AD 90–160); SA/CA (late 1st to mid-2nd century). The latest may be ST/GB which has a potentially wide date range (mid-2nd to 4th century) though still beginning in the mid-2nd century AD. No datable organic remains were recovered from this primary silting layer, and so it was not possible to include this layer in the radiocarbon dating programme. Nevertheless, the Roman pottery from the mid-1st to mid-2nd centuries AD provides a *terminus post quem* for the silting of the ditch, and there is no evidence that it was constructed significantly earlier. There are some ceramic joins between layers 3 and 4, for example a Sandy Grey ware jar of a form dating to *c.* AD

Feature	Flint	Pre pot	RB pot	RB CBM	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Latest datable finds (AD)
ST36, Layer 1	-	-	x	-	-	-	-	-	-	-	x	Med/PM
ST41, Layer 1	x	-	-	-	-	-	-	-	-	-	x	Med/PM
ST42, Layer 1	x	-	-	-	x	-	-	-	-	-	-	Not closely datable
SA5/2, Layer 1	x	-	x	x	x	-	-	-	-	-	x	Med/PM
SA6/2, Layer 1	x	x	x	-	-	-	x (S.244)	-	-	-	-	mid-2nd C
SA17/2, Layer 1	x*	x	x	-	-	-	-	-	-	-	-	4th C
ST35, Layer 1	x	-	x	x	x	x	-	-	x (Cat. no. 506)	x	-	early 5th C
ST41, Layer 2	x	-	x	-	-	-	-	-	-	-	-	Not closely datable
ST42, Layer 2	-	-	x	-	-	x	-	-	-	-	-	Not closely datable
SA5/2, Layer 2	x	x	-	-	x	-	-	-	-	-	-	Not closely datable
SA6/2, Layer 2	x	x	-	x	x	-	-	-	-	-	-	Not closely datable
ST35, Layer 2	x	-	x	x	x	x	-	-	-	x	-	early 4th C
ST41, Layer 3	x	-	x	-	-	-	-	-	-	-	-	2nd C
SA5/2, Layer 3	x	x	x	x	x	-	-	-	x (Cat. nos 471, 472, 473, 478)	-	-	mid-2nd C (pot) 4th C (coins)
SA6/2, Layer 3	x	-	x	-	x	-	-	-	-	-	-	mid-2nd C
ST41, Layer 4	x	-	x	-	-	-	-	-	-	-	-	Not closely datable
ST42, Layer 4	-	-	x	-	-	-	-	-	-	-	-	Not closely datable
SA5/2, Layer 4	x	-	x	-	-	-	-	-	-	-	-	late 1st C–mid-2nd C
SA6/2, Layer 4	-	-	x	-	-	-	-	-	-	-	-	late 1st C–mid-2nd C
ST35, Layer 4	-	-	x	-	-	-	-	-	-	-	-	late 1st C–mid-2nd C

Table 9.2 Finds from enclosure ditch contexts by layer (contexts which produced no finds or where layer was not recorded, are omitted) (Abbreviations: CBM = ceramic building materials; IA = Iron Age; Med/PM = medieval or post-medieval; pot = pottery; Pre= Prehistoric; RB = Romano-British; * = flint not located at time of publication)

60–120 is represented in joining sherds from both SA/BQ (layer 4) and SA/BK (layer 3). This suggests that there was not a large gap of time between the primary silting and further gradual backfilling or silting of the ditches.

Layer 3 contained a far wider range of find types, predominantly Romano-British pottery dating from the mid-1st to 2nd centuries. Four 4th-century Roman coins (Cat. nos 471, 472, 473, 478) were found in level 3 of the enclosure ditch in Trench 5, see **Fig. 9.5a**, perhaps suggesting that the ditches were still open to this level at this time. This is supported by the only radiocarbon date from Layer 3 (SA/BT, **Table 9.3**), which suggests a 3rd to mid-4th-century date is most likely for the animal bone tested.

Layer 2 produced very little closely datable material, apart from Section ST35 which, as mentioned above, is an unusual case. Charcoal and animal bone gave radiocarbon dates spanning the mid-2nd to mid-5th centuries at the 95% confidence level, with a date range from the mid-3rd to early 5th century AD most likely. Whilst levels 3 and 4 are generally consistent with gradual silting of the ditch from the later-1st to mid-2nd centuries, Layer 2 shows signs of intentional backfilling in some areas. In Trench 17 there seems to be a dump of carrstone into the inner side of the

Sample type	Site code	Context	Date ranges at 95.4% probability
Charcoal	ST/DY	ST35, enclosure ditch, Layer 1	332–430 cal AD (92.1%); 493–510 cal AD (2.2%); 519–528 cal AD (1.1%)
Animal bone	ST/DY	ST35, enclosure ditch, Layer 1	263–275 cal AD (1.5%); 330–430 cal AD (90.8%); 494–510 cal AD (2.1%); 519–528 cal AD (1.0%)
Charcoal	ST/HL	ST42, enclosure ditch, Layer 2	255–302 cal AD (22.7%); 316–402 cal AD (72.7%)
Animal bone	SA/AK	SA5/2, enclosure ditch, Layer 2	257–297 cal AD (15.5%); 320–410 cal AD (79.9%)
Animal bone	SA/CO	SA6/2, enclosure ditch, Layer 2	128–258 cal AD (89.5%); 296–322 cal AD (5.9%)
Charcoal	ST/EZ	ST35, enclosure ditch, Layer 2	263–275 cal AD (2.7%); 330–423 cal AD (92.7%)
Animal bone	ST/EZ	ST35, enclosure ditch, Layer 2	140–198 cal AD (12.9%); 208–336 cal AD (82.5%)
Animal bone	SA/BT	SA6/2, enclosure ditch, Layer 3	141–197 cal AD (7.5%); 208–344 cal AD (87.9%)

Table 9.3 Radiocarbon dates from the enclosure ditch contexts by layer (for full details see Table 5.3)

ditch at the base of Layer 2, suggesting that an inner bank may have collapsed or been destroyed. The broken carrstone which makes up the south side of Layer 2 in ST35 may also be the remains of a slumped bank (although this could also have been caused by animal disturbance).

As well as the possible demolishing of the bank, ST35 was deliberately infilled with a large compact mass of slag and furnace debris, dumped from the south side (Layer 1, **Fig. 9.6**). This infilling was carried out along a stretch of ditch extending around 20m and was probably intended to provide a broad causeway giving entrance across the ditch on the north side. The top of this slag layer was truncated by the plough soil, so the surface of the causeway has not survived. The deposition of the slag was dated by Roman pottery, including sherds of Oxford ware dating no earlier than AD 350, and possibly as late as the early 5th century AD (ST/DN, ST/DY, ST/EZ). These were the latest fragments of Roman pottery from the site. An undated but most likely Roman coin (Cat. no. 506) was recovered from the top of the slag. Radiocarbon dates (**Tables 5.3**, **9.3**) support a date range of the mid-4th to mid-5th century AD for the infilling of the upper levels of the ditch in Trench ST35 (the charcoal dates should be considered more reliable than the heavily abraded animal bone, since the latter is more likely to be residual; all the charcoal samples for radiocarbon dating were identified by Caroline Cartwright (see below) as young roundwood <10 years old, and were found in the dumps of furnace debris). The date for the charcoal from ST/DY is cal AD 260–540 at 95% confidence, but the bulk of the probability is concentrated in the range 332–430 cal AD at 92.1% confidence).

Elsewhere, beyond ST35, the uppermost layer of the enclosure ditch (Layer 1) contained a very wide variety of finds including, in some cases, post-medieval pottery. In some areas it may have been disturbed by deep ploughing. The only other stratified metalwork came from this layer: a Late Iron Age brooch fragment from Layer 1 in SA6/2 (S.244). An Iron Age gold coin (Cat. no. 244) was also found in the upper fill of the enclosure ditch in ST45, most likely disturbed from the central area of the field.

It is notable that there is very little handmade Middle or Late Iron Age pottery from the enclosure ditch. Prehistoric pottery, presumably residual as it is highly abraded and, in some cases, overlies Roman pottery, was generally only recovered from the enclosure ditch in Trenches 6 and 17, and only in the upper Layers 1 and 2. These are slightly downhill from the main field, in the south-east corner of the site. The pottery in Layer 1 could have been introduced by deep ploughing (which ran NW to SE across the site), and that in Layer 2 perhaps through natural downhill spread of disturbed material. The only exception is an abraded Early Iron Age sherd (SA/AV) in Layer 3 in Trench 5, which must certainly be residual, since it occurs alongside 4th-century material (**Table 9.2**).

Overall, the evidence suggests that the enclosure was dug at the earliest in the mid-1st century, most likely after *c.* AD 100. Subsequent silting leading to the deposition of small quantities of mid-1st to mid-2nd-century AD Roman pottery towards the base of the ditch. There is relatively little evidence for 1st-century AD activity at the site, with small quantities of pottery, and only Hoards M (potentially) and P likely dating to this period. The enclosure ditch seems to have remained open as late as the 4th century AD, when it appears that in some areas there were deliberate attempts to backfill it. This is most noticeable in ST35, on the north side of the enclosure, where a dump of animal bone and furnace debris was used to create a new causeway across the ditch. Like the destruction of the square structure in the wooded area (Hutcheson 2011, 44) this deliberate infilling most likely dates to around the mid-4th to early 5th century AD. This points to deliberate re-purposing of the site around this time.

Roman pottery

Alice Lyons, based on an earlier report by Val Rigby

Introduction

A total of 267 Roman pottery sherds, weighing 4,045g (7.46 Estimated Vessel Equivalent (EVE)) were recovered during

Fabric number: description	Vessel forms	Count	Weight (g)	EVE	Weight (%)	EVE (%)
1: Sandy Grey wares	Beaker (folded), bowl, carinated jar, dish (flanged), flagon, jar (lid-seated), lid, storage jar, spindle whorl	220	3,151	5.67	77.90	76.00
2: Miscellaneous Coarse wares	Beaker, bowl, dish, flagon, jar, platter	23	261	0.85	6.45	11.39
3: Lower Nene Valley Grey ware	Flanged dish, necked jar	5	204	0.52	5.04	6.97
4: Colchester Colour-coated ware	Cup	1	1	0.00	0.02	0.00
5: Lower Nene Valley Colour-coat ware	Beaker, box lid, flagon, flanged dish, jar	10	173	0.33	4.28	4.42
6: Oxford Red-slipped ware	Bowl	2	19	0.00	0.47	0.00
7: Hadham Oxidised ware	Cordoned jar	2	13	0.02	0.32	0.28
8: Sandy Buff ware	Mortaria	2	153	0.07	3.78	0.94
9: Sandy Oxidised ware	Mortaria	1	49	0.00	1.22	0.00
10: Lower Nene Valley White ware	Mortaria	1	21	0.00	0.52	0.00
Total		**267**	**4,045**	**7.46**	**100.00**	**100.00**

Table 9.4 The Roman pottery assemblage, listed by fabric number

excavations at Ken Hill. This represents a minimum of 113 individual vessels. The majority of this pottery assemblage was recovered from the enclosure ditch, whose primary fills contain early to mid-Roman pottery. Latterly a large metalworking debris deposit, which contained diagnostically late (mid-4th +) Roman pottery, was laid to form a causeway across the enclosure.

In contrast to the large, well-preserved later prehistoric assemblage (see Chs 6–8) the Roman pottery is small and fragmentary. With the exception of the illustrated vessels, most pots are represented by just one worn sherd and even the more complete vessels show marked evidence of weathering. Generally, the assemblage is severely abraded with little or no original surface finish surviving, with an average sherd weight of 15g.

The abraded character of Roman pottery found at Snettisham has been noted previously (Flitcroft 2001, 65–6; Hutcheson 2011, 44) and indicates that this material has been exposed to significant post-depositional disturbance, probably during the middening process and possibly also by the plough; this pottery should therefore be considered residual or at least not deliberately deposited.

Methodology

The late Val Rigby undertook the initial analysis and wrote a draft report directly after excavations were completed in 1992; this work was reviewed and developed (at Val's request) by Alice Lyons in 2019.

The pottery was re-evaluated following the national guidelines (Barclay *et al.* 2016). The total assemblage was studied, and a catalogue was prepared (in archive). The sherds were examined using a hand lens (x10 magnification) and were divided into fabric groups defined based on inclusion types present. The sherds were counted and weighed to the nearest whole gram and recorded by context. Decoration, residues and abrasion were also noted. Vessel forms (jar, bowl) were also recorded although no overall typology was possible due to the fragmentary condition of the sherds. In lieu of a typology the most complete vessels from stratified deposits were selected for illustration to provide a visual characterisation of the assemblage. Parallels for fabrics and forms have been referenced from local excavations (Flitcroft 2001; Lyons 2004) and the National Roman Fabric Reference Collection (Tomber and Dore 1998). The BM curates the archive.

The pottery

A total of 10 broad fabrics were identified (**Table 9.4**).

Coarse wares

Fabric 1: Sandy Grey wares

The majority of the assemblage (80% by weight) comprises locally produced utilitarian Sandy Grey (reduced) wares. No kilns were found during this excavation, but local contemporary coarse ware manufacture has been previously recorded elsewhere in Snettisham village (Lyons 2004, 32–41). This fabric was mainly used for jar/bowl and storage jars, although a small number of beakers and flagons were identified, and also a complete conical spindle whorl. Within this broad group it was possible to isolate several distinctive subgroups (Fabrics 1a–1d), which are characterised briefly below (**Table 9.5**).

Fabric 1a: Early Roman Sandy Grey ware

These Early Roman jar/bowl forms combine handmade and wheel-throwing techniques with hand-shaped bases and wheel-finished shoulder, rim and external finish. The fabrics are fine, sandy and have a red/brown core and dark-grey to black surfaces. The firing temperature was low with damp smoke-producing fuel being added after the initial period of oxidation. Date: AD 70–120.

Fabric 1b: Black-slipped Sandy Grey ware

This fabric is similar to 1a, probably using the same local clay source. It was primarily used to produce necked jars, some of which were lid-seated, and also shallow dishes or platters and one example of a folded beaker. The wheel-thrown vessels were fired at a higher temperature, with a grey core and dark-grey to black surfaces. Date: AD 70–150.

Fabric 1c: Coarse Sandy Grey ware

Again, this fabric originated from the same local clay source, but was mainly used for the manufacture of large storage

Fabric number: description	Vessel forms	Count	Weight (g)	EVE
1: Sandy Grey wares	Beaker (folded), bowl, flagon, jar (lid-seated; carinated), lid, storage jar, spindle whorl	87	777	1.92
1a: Early Roman Sandy Grey ware	Bowl, necked jar	30	150	0.65
1b: Black-slipped Sandy Grey ware	Beaker (folded), necked jar (lid-seated), platter	37	404	1.23
1c: Coarse Sandy Grey ware	Dish (flanged), jar, storage jar	14	652	0.57
1d: Sandy Grey ware with argillaceous pellets	Beaker (carinated), dish, jar, necked bowl, lid	52	1168	1.30
Total		**220**	**3,151**	**5.67**

Table 9.5 The Sandy Grey ware fabrics, listed in numerical order

jars so the clay was heavily tempered with coarser sand, argillaceous pellets and carrstone fragments of between 1mm and 5mm. Date: 2nd century AD.

Fabric 1d: Sandy Grey ware with argillaceous pellets
This distinctive Sandy Grey ware fabric contains common argillaceous pellets as a natural component of the clay body. Most sherds are from a large necked bowl, but a carinated beaker, jar and dish/lid pieces were also found. These vessels are wheel-thrown and kiln-fired, with a light grey-buff core with darker blue-grey surfaces. This fabric has been previously identified in south Norfolk (Lyons and Tester 2014: VGW) and also to the north in Lincolnshire (Stead 1976, 136–53) which suggests a similar clay source was exploited along a large part of the English east coast. Date: early to mid-2nd century AD.

Fabric 2: Miscellaneous Coarse wares
Various undifferentiated reduced and oxidised wheel-thrown sand-tempered kiln-fired grey wares are included here. The sherds are too small and abraded for classification.

Fabric 3: Lower Nene Valley Grey ware (Perrin 1999, 78–87)
Sand-tempered white ware with pale blue-grey metallic surfaces, the exterior highly burnished in zones. Two vessels identified: a flanged dish with incised scroll on the flange and a large necked jar. Date: late 2nd to early 4th century AD.

Fine wares

Fine wares are poorly represented within the assemblage; notably no Gaulish samian (Tomber and Dore 1998, 25–41) was found. This absence, however, is typical of outlying minor settlements anywhere within Roman Britain as its consumption was concentrated at major foci where inhabitants had access to markets and surplus income to spend on luxury goods. In this particular case, it is also possible that scavengers removed any samian from accumulated rubbish for trimming and re-use before it was dumped on the site. The remaining fine ware assemblage, although small, proves a connectiveness beyond the local economy with a particularly strong affinity with the large Lower Nene Valley manufacturing centre located at *Durobrivae* (Water Newton near Peterborough), *c.* 60km south-west of Snettisham on the western fen edge.

Fabric 4: Colchester Colour-coated ware (Tomber and Dore 1998, COL CC 1, 132)
A smooth buff fabric with a buff-coloured slip produced in Colchester, Essex. Found in the form of a CAM 62 cup. Date: pre-AD 79 (pre-Flavian).

Fabric 5: Lower Nene Valley Colour-coated ware (Tomber and Dore 1998, LNV CC, 118)
This pale fabric consistently decorated with an iron-rich orange-brown slip was found in a range of vessel forms including beakers (late 2nd–mid-3rd century) and a flagon, lid, flanged dish and beaker (4th century). Date: late 2nd to 4th century AD.

Fabric 6: Oxford Red-slipped ware (Tomber and Dore 1998, OXF RS, 176)
This is a distinctive orange fabric, usually with a grey core and fine slip, often stamped and rouletted. Two bowl sherds were found, one stamped and one rouletted, probably from the same necked bowl (Young 1977, C78). Date: mid-4th century +.

Fabric 7: Hadham Oxidised ware (Tomber and Dore 1998, HAD OX, 151)
A bright orange fabric with slipped and burnished surfaces. One sherd was found from a cordoned jar. Date: mid-4th century +.

Mortaria

Mortaria are mixing bowls, lined with coarse grits (Tyers 1996, 117–35). Their presence here indicates the settlement that deposited this material had adopted Romanised kitchen wares and could afford to use these specialised and expensive vessels (de Bootman and Lyons 2021).

Fabric 8: Sandy Buff ware (Tomber and Dore 1998, COL WH, 133)
Beaded and flanged mortarium fragment. The sandy fabric is even-textured and brown-buff in colour. Only one worn example (two joining sherds) was found, for which no surface finish survives; traces of white and grey trituration grit only over the rim. Probably traded from Colchester rather than local to north Norfolk. Date: early to mid-2nd century (Hadrianic–Antonine).

Fabric 9: Sandy Oxidised ware
Bead and flanged mortarium fragment. The fabric is orange sandy ware with brown argillaceous inclusions. Worn, but with traces of a clear white slip under the flange. Probably of local manufacture as occasional white-slipped mortaria are known to be produced at Pentney (de Bootman and Lyons 2021). Date: 3rd–4th century AD.

Fabric 10: Lower Nene Valley White ware (Tomber and Dore 1998, LNV WH, 119)
One mortarium white ware body fragment, with slag trituration grits. Date: 3rd–4th century AD.

The illustrated catalogue of Romano-British forms **(Fig. 9.7)**
Vessels are wheel-thrown and kiln-fired unless stated otherwise.

1. Carinated beaker, rim only. Fabric 1d: Light-grey sandy texture with dark-grey argillaceous inclusions (?ironstone); severely abraded, no surface finish survives. AD 90–160. SA/BM 1; SA5/2, Section G, Layer 4.
2. Necked bowl, complete profile. Fabric 1a: Red-brown core, black surfaces, roughly smoothed finish. Almost complete vessel. Hand-shaped, wheel-finished and clamp-fired. A local product. AD 65–85. SA/BQ 1+ SA/AR+ SA/AY+ SA/BR. SA5/2, Sections B, C and F, Layers 1, 3 and 4.
3. Ring-necked flagon, three even rings. Fabric 2: Orange ware, no evidence of a cream slip. Complete neck circuit (5cm diameter) and a single handle. Probably local, no obvious identifying characteristics. AD 120–180. SA/BK 1. SA5/2, Section G, Layer 3.
4. Flat-based platter. Fabric 1b: dense stippled black argillaceous pellets, some fine white quartz sand: sandwich firing; grey core; red/brown under-surface; black slurry smoothed surface finish. Clamp-fired. A local product. AD 120+. SA/AU 1, SA5/2, Section B, Layer 3.
5. Necked jar, with slight shoulder groove. Fabric 1b: Unevenly fired; grey core; dark-grey surfaces with buff patches and a smoothed finish. A local product. Clamp-fired. AD 70–120. SA/AV 1, SA5/2, Section D, Layer 3.
6. Necked jar, with shoulder groove. Fabric 1b: light-grey-brown core; traces of dark-blue-grey surfaces; extremely abraded, no surface finish survives. Probably a local product. AD 70–120. SA/AV 2, SA5/2, Section D, Layer 3.
7. Wide-mouthed jar, with shoulder groove. Almost complete rim and base circuits but no complete profile. Fabric 1d: Light-grey sandy core with dark-grey argillaceous inclusions (?ironstone); darker grey surfaces; abraded, with traces of a burnished finish above the shoulder groove. AD 90–180. SA/AL and SA/AU, SA5/2, Sections A and B, Layer 3.
8. Necked storage jar, slight cordon at neck base and shoulder groove. Fabric 1c: Heavily tempered with coarse brown carrstone fragments between 1–5mm, plus black argillaceous and white quartz sand; sandwich firing, grey core, red-brown under-surface and surfaces with a black matt slurry finish. Rim certainly wheel-finished, but due to size and weight, the base and body were hand-shaped. Clamp-fired. A local product. AD 70–160. SA/AN and SA/AQ, SA5/2, Sections B and C, Layers 1 and 3
9. Bead and flange mortarium. Fabric 8: Buff even-textured sandy matrix; extremely abraded, with very worn interior, traces of grey and white flint trituration grits confined to the rim. Slightly burnt at the base. One rim and base. Colchester product. AD 120–160. SA/CN 1, Trench 6, topsoil.
10. Bead and flange mortarium. Flange fragment only. Fabric 9: Orange sandy matrix, cream surfaces. No evidence of trituration grit. Probably made at Pentney, Norfolk. SA/CN 2, Trench 6, topsoil.

The pottery in context

The majority of the stratified pottery assemblage was recovered from the enclosure ditch, whose primary fills contained pottery deposited in the Flavian to Antonine period (AD 70–160). A number of slots were excavated through this ditch, and most areas produced small amounts of stratified early to mid-Roman locally produced coarse ware pottery (ST35, ST36, ST41, ST42, SA5/2, SA6/2, SA17/2 and SA18/2). Similar small deposits of mid-Roman pottery were also recovered from ditch SA14/2, which may be an extension of the enclosure ditch to the south of SA5/2.

In one area in the north (ST35), a large deposit of waste metalworking debris (slag) had been laid over the enclosure ditch as 'hardcore' to form a causeway. This layer contained pottery diagnostic of the later Roman period (mid-4th to early 5th century), notably Lower Nene Valley Colour-coated and Oxford Red-slipped ware vessels.

The only other areas which produced Roman pottery from archaeological features were Trenches SA3 (likely residual in post-medieval ditch SA3/2), SA6 (ditch SA6/3 and pit SA6/10, neither of which could be closely dated), SA7 (ditches SA7/3, SA7/5, SA7/6, SA7/7) and SA12 (animal burrow/?post hole SA12/5). Apart from the well-preserved upper part of a cupped rim flagon found in SA3, the remainder of the Roman pottery found within these deposits was characterised as being locally produced coarse wares mostly comprising undiagnostic jar/bowl forms, with a small number of finer beaker fragments also found. Trenches SA7 and SA12 are otherwise notable for large quantities of prehistoric (mostly Early Iron Age) pottery, and none of the features could be securely dated as Roman.

The enclosure ditch

Roman pottery was recovered in small quantities from several of the slots excavated across the enclosure ditch (ST14, ST42, SA6, SA14, SA17 and SA18). The material excavated from SA5/2 has been chosen to describe in detail as it was the best-preserved group and is thought to be representative of the larger assemblage.

South-west enclosure ditch SA5/2

Section SA5/2 of the enclosure ditch had four distinct fills:

- Layer 1: sandy topsoil
- Layer 2: similar to level 1, but with intermixed yellow sand and higher frequency of stones
- Layer 3: a more gravelly and coarse sandy fill
- Layer 4: lighter, sandy fill with few stones, the primary silting of the ditch.

Pottery from the primary deposits (Layer 4) of the ditch comprise several sherds from grey (Fabric 1; 2 sherds, weighing 7g) and oxidised (Fabric 2; 2 sherds, weighing 15g) fine sand-tempered kiln-fired vessels of indeterminate closed forms which are unlikely to be earlier than 2nd century AD. Also found was the fragmentary remains of a carinated beaker (Fabric 1d; 2 sherds, weighing 15g) manufactured

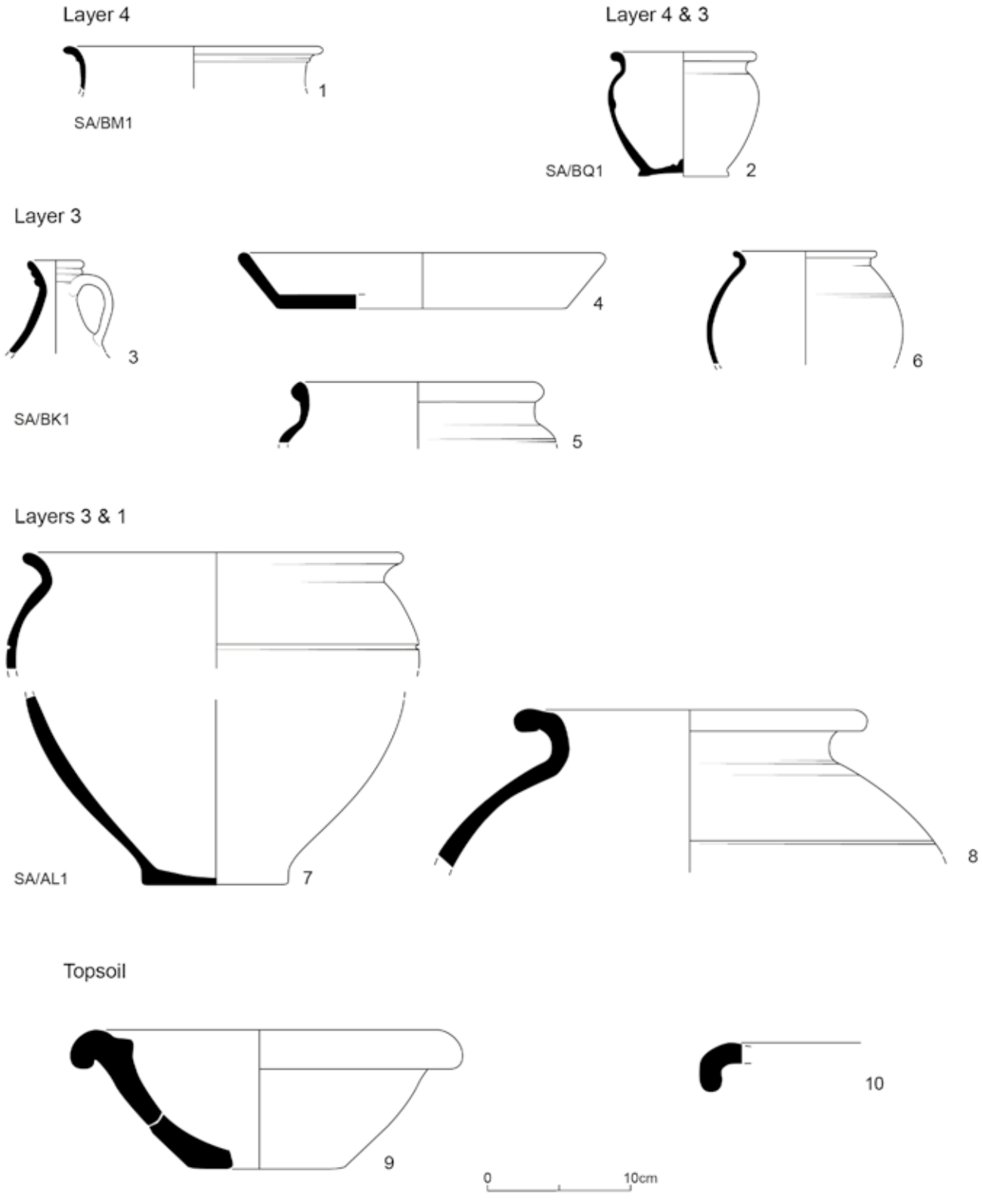


Figure 9.7 The catalogue of illustrated Romano-British pottery forms

between AD 90 and 160 (**Fig. 9.7.1**). A Lincolnshire source is suggested for this beaker as it is typical of the Dragonby/Roxby product range found at Old Winteringham and Winterton in Hadrianic–Antonine contexts (Stead 1976, 136–53). The earliest stratified vessel, however, is a hand-shaped and wheel-finished necked bowl in a local sandy fabric (Fabric 1a; 15 sherds, 99g) dating to AD 65-85 (**Fig. 9.7.2**). Joining sherds from this necked bowl, which together form a complete profile, were found in different slots in Layer 4, and also higher up in the stratigraphic sequence in Layer 3.

The most diagnostic pots were scattered along the ditch throughout Layers 3 and 1. Of these the most complete vessel is a fragmentary, but almost restorable to complete, large necked bowl which was also produced in the 2nd century AD (**Fig. 9.7.7**) (Fabric 1d; 6 sherds, 119g). Like the beaker found in Layer 4 (**Fig. 9.7.1**), the fabric of this vessel suggests it may also have its origins in north Lincolnshire. Despite most sherds being present, they have abraded fracture edges and little surface finish survives; they are in poor condition compared to some of the prehistoric vessels, suggesting that they were exposed to the weather for some time before deposition.

Although represented by only a few sherds, three other vessels were recovered in reasonably good condition. These comprise a very large storage jar with a rim diameter of 24cm (Fabric 1c; 3 sherds, weighing 436g) likely to date to the late 1st or early 2nd century, the complete neck and handle from a flagon (**Fig. 9.7.3**; Fabric 2; 1 sherds, 44g) and a deep platter (Fabric 1b; 6 sherds, 127g) both of 2nd-century date.

The weathered condition of the majority of Roman pottery sherds within the ditch can only be the result of a significant period of exposure after they were broken and before their final deposition. Fragments of the same vessel being present in consecutive layers within the ditch, such as the hand-shaped necked bowl (**Fig. 9.7.2**), suggests they were laid down fairly quickly before the different parts of the vessel became completely dispersed. One explanation for this pattern of deposition is that all the pottery was deposited within the ditch within a short time, possibly originating from an adjacent decaying midden which would explain both its weathered condition and the presence of related sherds in different layers within the ditch. Sadly, due to their residual nature, this pottery provides only a tentative *terminus ante quem* for the digging of the ditches. It is also worthy of note that no pottery datable to the 3rd or 4th centuries was identified in the lower enclosure ditch deposits (although a few highly abraded pieces were found in the uppermost layer, along with post-medieval fragments).

North enclosure ditch, feature ST35

This part of the enclosure ditch had an unusual section. The lower layers, 2–4, seem similar to those of the south-west enclosure ditch, with an underlying Layer 5 which may simply be natural weathered carrstone. However, the uppermost level, 1, was not the sandy topsoil seen in other areas of the enclosure ditch but consisted of a large quantity of slag, furnace debris and charcoal, probably deliberately laid as a causeway.

The pottery group from the ditch filling includes traded wares typical of supply to north Norfolk in the Late Roman period (Andrews 1985, 86). There are no obvious medieval or modern sherds. The most common source, probably due to its river connection, is the Lower Nene Valley potteries (Perrin 1999) with six colour-coated vessels, a white ware mortarium and two grey ware pots, a jar and a bowl. There is at least one bowl in Oxford Red-slipped ware which is unlikely to pre-date the mid-4th century. (At present the chronological evidence demonstrates that, excluding London, Oxford Red-slipped wares did not reach sites east of Watling Street in any quantity before the early 4th century).

All of these sherds were found stratified within or below the slag layer. They are single sherds, abraded and each representing a single pot. The presence of this diagnostically Late Roman pottery indicates that the slag surface cannot have been laid before AD 350.

Conclusion

This assemblage comprises two distinct groups of Roman pottery: one early to mid-Roman deposit related to the silting-up of the enclosure ditch, the second a Late Roman group associated with the construction of a new causeway into the enclosure. Although the quantity of material is small, and the condition of the pottery poor, enough survives to establish that both groups largely comprise locally made utilitarian coarse ware jar/bowl forms. In addition, the presence of non-local coarse wares (from Lincolnshire), traded domestic British fine wares (primarily from the Lower Nene Valley, also Essex, Oxfordshire and Hertfordshire) and specialist mixing bowls (mortaria from the Nene and Nar Valleys) demonstrate that the settlement that deposited this material had both the surplus wealth and the trade connections to acquire non-local wares, particularly so in the later Roman period.

Enough diagnostic material has survived, therefore, to make a significant contribution to the interpretation of the site and character of the nearby settlement that deposited this material.

Roman ceramic building material

Alice Lyons, based on an earlier report by Val Rigby

Introduction

A total of 11 Roman ceramic building material (CBM) fragments, weighing 707g, were recovered from the enclosure ditch and unstratified within the nearby woodland at Ken Hill. No complete examples were found, and the fragments have an average sherd weight of only 64g.

Methodology

The CBM was counted and weighed, identified by form and fabric type, any complete dimensions measured, and a catalogue prepared (in archive). Levels of abrasion, any evidence of re-use or burning were also recorded. This follows guidelines laid down by Archaeological Ceramic Building Materials Group (ACBMG 2002). The site archive is held by the BM.

The assemblage (Table 9.6)

The Roman tile was consistently made in a sandy orange/red fabric with occasional small flint (3–6mm) inclusions, consistent with local production.

Description	Fragment count	Weight (g)
Roof: *tegula*	2	272
Hypocaust: box flue	3	262
Roof: *imbrex*	3	154
Undiagnostic fragments	3	19
Total	**11**	**707**

Table 9.6 The CBM assemblage, listed in descending order of weight

Although no complete examples were found, some pieces could be identified, and these comprise roof tile: *tegula* and *imbrex*, also box tile: which would have been fixed into the wall to transport hot air as part of the hypocaust heating system.

Conclusion

The presence of this Roman tile indicates a substantial Roman dwelling once existed in the vicinity, but this material may have been transported some distance (for re-use or use as hardcore) from the location of this building.

Debris of iron production

Paul Craddock and Janet Lang

In one section of the polygonal enclosure ditch large quantities of slag and associated metallurgical debris had been dumped, presumably from nearby iron production.

Iron smelting by the direct or so-called bloomery process involved the reduction of the iron ore minerals to produce a solid lump of iron, the bloom, and large quantities of slag. The bloom formed in the hottest part of the furnace in the vicinity of the bellows pipes whereas the liquid slag drained to the bottom of the furnace from where it could be periodically tapped. As the bloom had never been molten it invariably contained quantities of slag together with unreduced ore and charcoal. To remove the majority of these the bloom was vigorously hammered at white heat to literally squeeze them out, the process known as bloom smithing. This process required the bloom to be frequently reheated on a hearth, which also produced a slag and fragments of the vitrified and slagged hearth lining. The refined bloom could then be made into the required artefacts by blacksmithing, hammering the iron at red heat, which also required frequent reheating on a hearth creating more slaggy material and fragments of the hearth.

The vast majority of the furnace debris from Snettisham came from ST35, a slot through the north side of the enclosure ditch in Area 21. Here, the section through the enclosure ditch was quite unlike that seen elsewhere. It appears that, rather than gradual silting, a stretch of around 20m of the ditch was deliberately backfilled with furnace debris and charcoal, perhaps to create an entranceway. Pottery recovered from immediately above and below this deposit suggest that this was done after the mid-4th century AD (see above).

Furnace debris was recovered from the upper fill, Layer 1 (ST/BX, ST/DH, ST/DO, ST/DP, ST/DX, ST/DY) and the fill immediately below, Layer 2 (ST/EZ). This material from the ditch comprised mainly fragments of slag together with some heavily slagged and vitrified rough clay material and a selection was made, concentrating on the slagged clay material as being more likely to be informative of the processes involved.

Fragments of slag and partially slagged and vitrified clay fragments are not uncommon finds on Iron Age and later sites, and are usually to be interpreted as the remains of blacksmithing. Here the considerable quantities of slag are suggestive of smelting. This is confirmed by the presence of tap slag as only the smelting process generated sufficient quantities of slag to require periodic draining. The slagged and partially vitrified clay pieces had the shape and appearance typical of hearth bottoms and are likely to be associated with bloom smithing operations, although some blacksmithing operations cannot be excluded.

Metal-detecting just to the south-east of ST35 produced several unstratified lumps of slaggy iron in the vicinity of the ditch (ST/GD). These were initially assumed to be fragments of failed blooms, but on metallographic examination were found to be of metal that had once been molten. Furthermore, they were not of the more familiar cast iron, iron with a little carbon, but instead were of almost pure iron with substantial traces of phosphorous. This would have lowered the melting point of the iron quite substantially; the full metallurgical description of these highly unusual and interesting pieces are published elsewhere (Lang *et al.* 2019). Whilst these pieces are unstratified, it is likely that they belong to the same Romano-British ironworking operations as the stratified material excavated from the ditch.

Cast iron was not intentionally produced until many centuries later. The primary product of the Romano-British smithing operations evidenced at Snettisham would have been a solid iron bloom formed near the bellows tubes in the centre of the furnace. The slaggy iron found during metal-detecting would have drained down as a component of the slag and it is very likely that the smiths were not aware of its existence.

As already noted, the low melting point was primarily due to the phosphorous content which would have been a component of the ore. Iron smelting slags with high phosphorous contents have been noted at other Roman iron smelting sites in Norfolk, including one at the nearby Station Road site in Snettisham (Chirikure and Painter 2002). At these sites the ore was identified as being composed of iron hydroxides, goethite and lepidocrocite, together with some iron oxide, hematite minerals in a sandy matrix. This is the highly ferruginous Norfolk carrstone, usually thought of as a decorative building stone, but which was certainly quarried for iron production in Roman times (Tylecote 1967).

The few pieces of slag collected from the ditch excavation were tested with a magnet but none contained metallic iron. This partly reflects the differing collecting strategies: the metal detectorists who recovered ST/GD were seeking metal, whereas the archaeologists were collecting process evidence, mainly the slagged and vitrified clay together with only a small selection of slag pieces that would have formed the bulk of the deposit.

The combined archaeological and metallurgical evidence suggests that here, as elsewhere in Late Roman

Taxon	Site code	Context
Salix sp., willow	ST/DH	ST35, enclosure ditch, Layer 1
Tilia sp., lime	ST/DO	ST35, enclosure ditch, Layer 1
Salix sp., willow; *Tilia* sp., lime; *Carpinus betulus*, hornbeam	ST/DQ	ST35, enclosure ditch, Layer 1
Carpinus betulus, hornbeam (< 10 years old)	ST/DY+	ST35, enclosure ditch, Layer 1
Castanea sativa, sweet chestnut	ST/DY	ST35, enclosure ditch, Layer 1
Corylus avellana, hazel	ST/DX	ST35, enclosure ditch, Layer 1
Corylus avellana, hazel	ST/EY	ST35, enclosure ditch, Layer 2
Salix sp., willow (< 10 years old)	ST/EZ+	ST35, enclosure ditch, Layer 2
Salix sp., willow; *Corylus avellana*, hazel (< 10 years old)	ST/HL+	ST42, enclosure ditch, Layer 2

Table 9.7 Charcoal from the enclosure ditch (samples marked with + were radiocarbon dated, see Tables 5.3, 9.3)

Norfolk, the phosphorous-rich ferruginous carrstone was being smelted to produce iron.

Charcoal from the enclosure ditch

Caroline Cartwright

Charcoal samples from eight contexts in the enclosure ditch were submitted for taxon identification using a variable pressure scanning electron microscope (see Chapter 19 for methodology). Some roundwood (branch or twig) fragments less than 10 years old were then selected for radiocarbon dating. **Table 9.7** provides the details, including three that yielded radiocarbon dates around the mid-3rd to early 5th or mid-6th century AD, with the probabilities concentrated in the mid-4th to mid-5th century AD (see **Tables 5.3, 9.3**). The charcoal fragments from enclosure ditch contexts appear to be associated with furnace debris (see above), so it is not surprising to find that the taxa selected included those renowned for yielding good charcoal for fuel (see **Table 19.3**). *Salix* sp. (willow), *Tilia* sp. (lime), *Carpinus betulus* (hornbeam) and *Corylus avellana* (hazel) feature prominently in the specimens that were radiocarbon dated; all of these taxa yielded roundwood less than 10 years old. In addition, charcoal fragments from a post-Roman introduced tree, *Castanea sativa* (sweet chestnut) (**Fig. 9.8**) were present in ST35, enclosure ditch Layer 1 (ST/DY). These were not submitted for radiocarbon dating, as there were younger fragments of hornbeam present from the same context.

Animal bone and mollusc shell from the enclosure ditch

Alan Pipe

This section presents the Phase 4–5 animal bone. For Methodology, see Chapter 7.

Area 21, ST35, enclosure ditch, Layer 1

ST/DN produced eight fragments of identifiable mammal bone: two of horse *Equus caballus* and six of cattle *Bos taurus*. Horse produced two fragments of worn adult mandibular (lower jaw) teeth. Cattle included single fragments of worn adult left-side upper premolar tooth with right-side humerus (upper fore-leg), radius and ulna (lower fore-leg), adult cervical (neck) vertebra and femur (upper hind-leg). The radius was fused at the proximal end indicating an animal in at least the second year; this bone had been chopped transversely. The femur had been knife-cut. There was no other evidence for modification.

ST/DX produced five fragments of identifiable mammal bone derived from horse *Equus caballus*; sheep/goat *Ovis aries/Capra hircus*; and dog *Canis lupus familiaris*. Horse included single fragments of innominate acetabulum (hip socket) and a complete fully fused first phalange (basal toe joint). Fusion on the phalange indicated an adult horse in at least the second year. Sheep/goat included two fragments of radius (lower fore-leg); dog included an unworn canine tooth.

ST/DY produced seven identifiable fragments of mammal bone. These comprised a fragment of adult ram *Ovis aries* skull and horncore; a fragment of horse *Equus caballus* innominate; and single fragments of cattle *Bos taurus* right-side juvenile mandible (lower jaw), left-side adult upper premolar tooth, left- and right-side adult upper molar teeth and a complete, fully fused metatarsal (hind-foot). Fusion of the metatarsal indicated an animal in at least the third year. Measurement of the metatarsal greatest length allowed calculation of an estimated 'withers' (shoulder) height of 1.180m, somewhat taller than the 300 BC Iron Age (1.08m) and Romano-British (1.12m) examples quoted by Davis (1987, 178). A sample from this material was radiocarbon dated to 260–540 cal AD (at 95% probability, see **Table 5.3**).

Area 21, ST35, enclosure ditch, Layer 2

ST/EY produced 33 fragments of identifiable mammal bone mainly including 'cattle-sized' mammal, with small numbers of cattle *Bos taurus*, horse *Equus caballus*, sheep/goat *Ovis aries/Capra hircus*, horse *Equus caballus* and dog *Canis lupus familiaris*. 'Cattle-sized' mammal included 20 fragments of vertebra and rib; cattle included single fragments of worn right-side upper premolar tooth and cervical (neck) vertebra; horse included worn single fragments of lumbar (lower back) vertebra and innominate (pelvis); sheep/goat included two worn adult right-side upper molar teeth, with single fragments of left- and right-side sub-adult mandible (lower jaw); and right-side

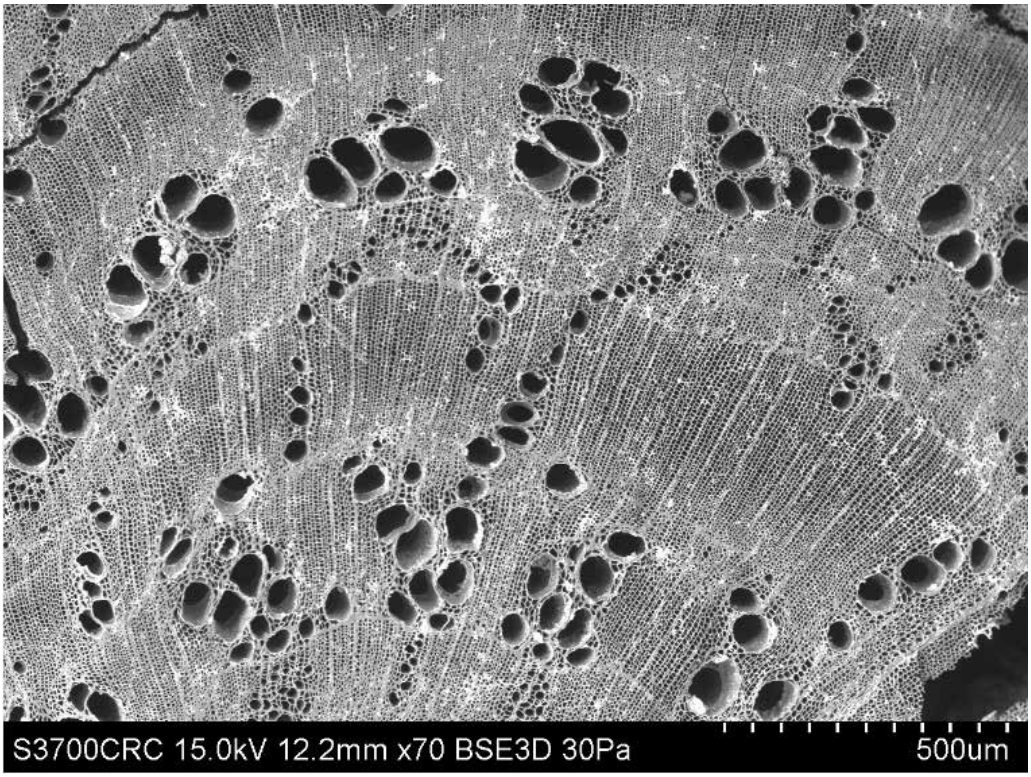


Figure 9.8 Variable pressure scanning electron microscope image of a transverse section of *Castanea sativa* (sweet chestnut) charcoal from ST35, enclosure ditch, Layer 1 (ST/DY). Image by C.R. Cartwright

astragalus ('ankle'); dog included single examples of right-side young adult mandible (lower jaw) and adult atlas (neck) vertebra and third metatarsal (hind-foot).

ST/EZ produced nine fragments of identifiable mammal bone, including cattle *Bos taurus*; sheep/goat *Ovis aries/Capra hircus*, horse *Equus caballus* and dog *Canis lupus familiaris*. Cattle included single fragments of sub-adult skull and ulna (lower fore-leg); sheep/goat included single fragments of adult incisor tooth and metacarpal (fore-foot); horse included single fragments of adult lumbar (lower back) vertebra and right-side femur (upper hind-leg), both probably from animals in at least the fourth year; dog included single fragments of adult left-side mandible (lower jaw), atlas (neck) vertebra and third metatarsal (hind-foot). There were no tool marks or any other evidence for modification. A sample from this material was radiocarbon dated to 210–360 cal AD (at 95% probability, see **Table 5.3**).

ST42, enclosure ditch, Layer 1

ST/GC produced unidentifiable fragments of mammal bone. An attempt to radiocarbon date this material failed (see **Table 5.3**).

Trench 5, SA5/2, enclosure ditch, Layer 1

SA/AJ produced a fragment of adult cattle *Bos taurus* left-side mandible (lower jaw). There were no tool marks or any other evidence for modification. In addition, this group included two valves (shells) of an economically important marine/estuarine bivalve mollusc species, common cockle *Cerastoderma edule*.

SA/AN produced a fragment of 'cattle-sized' long-bone mid-shaft. There were no tool marks or any other evidence for modification.

Trench 5, SA5/2, enclosure ditch, Layer 2

SA/AK included a fragment of cattle *Bos taurus* left-side humerus (upper fore-leg). There were no tool marks or any other evidence for modification. A sample from this material was radiocarbon dated to 250–420 cal AD (at 95% probability, see **Table 5.3**).

Trench 5, SA5/2, enclosure ditch, Layer 3

SA/AV produced 15 fragments of 'cattle-sized' tooth enamel. There were no tool marks or any other evidence for modification. An attempt to radiocarbon date this material failed (see **Table 5.3**).

Trench 6, SA6/2, enclosure ditch, Layer 2

SA/CO produced eight fragments of cattle *Bos taurus* tooth enamel with single worn adult right-side upper molar and lower third molar teeth. There were no tool marks or any other evidence for modification. A sample from this material was radiocarbon dated to 130–340 cal AD (at 95% probability, see **Table 5.3**).

Trench 6, SA6/2, enclosure ditch, Layer 3

SA/BT produced 11 fragments of cattle *Bos taurus* maxillary (upper) and mandibular (lower) premolar and molar teeth. Dental wear indicates all derived from adult, or at last sub-adult, animals with single left- and right-side mandibular third molars showing wear sufficient to indicate animals, probably the same individual, in at least the fifth year. There were no tool marks or any other evidence for modification. A sample from this material was radiocarbon dated to 220–370 cal AD (at 95% probability, see **Table 5.3**).

Trench 6, SA6/2, enclosure ditch, Layer ?

SA/BW produced only a single unidentifiable fragment of

'cattle-sized' long-bone mid-shaft. There were no tool marks or any other evidence for modification.

SA/CF included two fragments of adult horse *Equus caballus* maxillary (upper jaw) molar tooth. Both were worn, indicating adult animals. There were no tool marks or any other evidence for modification.

Trench 18, SA18/2, enclosure ditch (upper fill)

SA/JU included two shells of economically important marine/estuarine molluscs; single shells of common periwinkle *Littorina littorea* and common cockle *Cerastoderma edule*.

Possible Romano-British shale objects

SA/HW: Shale ?disc/?bead
Small section of a flat, circular shale pierced disc or bead. Flat on both sides, with sub-rectangular cross-section, tapering thinner on one side. Sharp breaks at both ends.
Dimensions: Weight: 0.6g; maximum length: 17mm; maximum thickness: 5mm; width: 10mm
Context: Ditch SA7/5, Section D (1992, Trench 7, Phase ?6)

SA/HC: Shale ?finger-ring/?bead
Flat, triangular piece of shale, with one corner sawn off, and saw marks indicating the beginnings of the removal of the second and, perhaps, third corners. Drilled through the centre with a large circular perforation. Most likely an early stage in the production of a finger-ring or thick, circular bead. Abraded surface with some chipping.
Dimensions: Weight: 22.8g; maximum remaining length: 57mm; thickness: 15mm; diameter of central hole: 16mm
Context: Topsoil/subsoil, over enclosure ditch SA17/2 (1992, Trench 17)

Whilst neither of these objects came from a datable context, similar simple shale beads and rings are known from Romano-British sites. See for example Tyrrell and Major (2015) and Crummy (1983, 49–50).

Discussion

Snettisham retained its importance into the earlier Roman period (Phase 4). Two hoards most likely date to the 1st and 2nd centuries AD: the large silver-copper alloy lumps of Hoard M and the now-lost silver coin hoard, Hoard P. The construction of the large polygonal enclosure ditch seems to have taken place around the late 1st to mid-2nd century AD. It was also most likely during Phase 4 that the square stone structure uncovered in the wooded area (Hutcheson 2011) was constructed. It has at least a special relationship to the enclosure, lying directly opposite the south-west entrance. Though there is no evidence that the structure itself was a focus for deposition of any kind, it stood between the entranceway and the area which produced the hoards. See discussion of movement around the site in this period in Chapter 8.

Hutcheson (2011) has interpreted this square structure as a Romano-Celtic temple, and that interpretation is followed here. Elsewhere in southern Britain, Romano-Celtic temples generally consist of two nested elements: an inner *cella* (5.1–16m across) and an outer ambulatory (8.5–22m across) (Lewis 1966, 1–56; Historic England 2018). They are often square in plan, as at Snettisham, but can also be rectangular, circular or polygonal. Many such sites sit within a larger walled or ditched enclosure defining the sacred precinct or *temenos*. There is no sign of an ambulatory at Snettisham, but this is paralleled at other sites. For example, at Hayling Island, off the Hampshire coast, there is no ambulatory around the *cella*, but it sits within a larger enclosure *c.* 40 x 43m (King and Soffe 2007). The high levels of phosphate in the wooded area (Ch. 5) indicate an area of intensive activity just north-west of the temple structure, over about 4,000m^2. Romano-British pottery was found in the same area, suggesting that this may have been contemporary with the temple, although it is equally possible that it might be associated with the midden-generating activity from Phase 2.

The polygonal *temenos* at Snettisham covers an area of around 8 hectares, partially enclosed by large V-cut ditches, 2.3–2.8m wide at the base of the plough soil, and 1.5–1.8m below the present ground surface. The south side was probably unenclosed, sloping down towards boggy ground and an inlet from the Wash. There are ditches on a similar scale potentially enclosing an area of Late Iron Age votive deposition at Sedgeford, just a few kilometres east of Snettisham (SHARP 2014, 37–47; Ch. 3), though the limited excavation and survey of these ditches do not allow a full reconstruction of their circuit. Elsewhere in southern England, there are other examples of Early Roman square temple structures sitting within a larger ditched *temenos* (Lewis 1966, 131–2). For example, at Harlow, Essex, a small square Romano-Celtic temple on a hilltop is surrounded by an oval enclosure ditch around the base of the hill, enclosing an area of around 4.9 hectares, while at Gosbecks, near Colchester, Essex, a square temple surrounded by a series of concentric ditched square enclosures sits within a *temenos* area of 2.65 hectares, defined by a walled and ditched boundary. Lewis (1966, 132) suggested that a 'non-defensive' ditch such as that seen at Gosbecks and Harlow might typically be the first stage in the enclosure of an Early Roman temple precinct, often being later replaced by a stone wall, though this did not occur at Snettisham or Harlow.

At Snettisham, it seems that the building of the Romano-Celtic temple and enclosure of the site was a way of bounding an existing sacred place which had been a site of deposition perhaps for several centuries. This is paralleled at other sites, including Hayling Island, where the Romano-Celtic temple seems to have succeeded an earlier Late Iron Age shrine (King and Soffe 2007). Hutcheson (2011; 2004, 90–2) has argued that in Early Roman Norfolk the building of Roman temples at sites which saw Late Iron Age deposition (such as Snettisham, North Creake and Fring) was a way of formalising a previously more fluid depositional landscape, and the transformation of the site at Ken Hill in the Early Roman period would certainly have redefined and perhaps overtly controlled the way in which the site was used and accessed. It is notable that the 'gold field' (the area which produced the Late Iron Age metalwork hoards), rather than the temple structure, sits at the centre of the *temenos*, suggesting that the main focus of the site may have remained a natural, open area perhaps with associated field system or enclosures (see Ch. 8). At other sites where the temple

structure is not central within the *temenos*, it has been suggested that a grove or natural feature such as a spring might have formed the main ritual focus (Lewis 1966, 134–5), but there is no direct evidence for a grove at Snettisham in the Late Iron Age, especially given the presence of a field system which is cut by the Phase 4 enclosure ditch (Ch. 5).

The enclosure ditch seems to have silted gradually from at least the mid-2nd century AD. Subsequently, there seems to have been a change in the use of the site in the Late Roman period, Phase 5 (*c.* AD 350–400). At this time, it appears that the enclosure ditch was only partially infilled, but there may have been a deliberate attempt to level the inner bank in at least some areas (seen in Trench 17 and ST35). At the centre of the north side (around ST35), the enclosure ditch was completely infilled for a length of around 20m with slag and furnace debris, most likely to create a causeway across the ditch, suggesting a re-organisation of the layout and use of the site. Pottery finds and radiocarbon dates suggest this occurred from the mid-4th century AD. In the Late Roman period, it is evident that there were a range of industrial processes taking place in the immediate vicinity of Snettisham (see e.g. Lyons 2004), and it is likely that the ironworking which produced the furnace debris filling the north side of the enclosure ditch probably occurred nearby. The square stone structure in the woods was also most likely demolished at around this time, with a Roman coin dated AD 350–360 securely lodged under the rubble of the north wall (Hutcheson 2011, 44). This may have constituted a deliberate abandonment of the site; there is very little evidence for early medieval activity.

Chapter 10
Phase 6: Medieval and Post-Medieval (*c.* AD 1100 onwards)

Julia Farley and Jody Joy, with a contribution by Alan Pipe

There is very little evidence for activity at Ken Hill in the immediate post-Roman period. The next phase which can be identified through ceramic evidence is medieval, represented by green-glazed Grimston Ware. No excavated features can be securely assigned to the medieval period however, with excavated post-Roman evidence mainly comprising post-medieval agricultural, drainage and landscaping work.

This chapter gives a brief summary of medieval and later activity, since it impacts on the legibility of some of the earlier phases. For example, deep ploughing and animal burrowing from extensive rabbit activity at the site has caused disturbance to the hoard pits and other features. A summary of the medieval and post-medieval ceramics and metalwork is presented, although a full report on this material is outside the scope of the current volume. The specialist report on animal bone from Phase 6 contexts (or radiocarbon dated to Phase 6) is also included below.

Medieval and post-medieval features

Several of the trenches excavated in 1992 produced clear evidence of post-medieval activity, including possible field boundaries, landscaping features and drainage ditches (see **Table 10.1**). In the majority of cases, these were E–W drainage or landscaping ditches running south of the modern drive, more or less along the line of the contours as the site slopes away from the hoard field. Sections of a ditch immediately to the south of the drive were uncovered in Trenches 5, 6, 7 and 17. In the latter case this feature clearly cut the enclosure ditch. Radiocarbon dates from animal bone recovered from the E–W ditches SA6/3 and SA7/5 gave dates in the AD 1430–1640 range at 95% probability (**Table 5.3**), and natural gully SA7/7 contained infant rabbit bones likely evidence of modern disturbance. Slightly further south, down the slope, other E–W ditches were revealed in Trenches 8 and 11. These were on the same alignment and so are likely the same feature, or closely related. Slightly further south again, Trench 3 contained a modern drainage ditch, also running E–W, with an 18th to 19th-century ceramic field drain at its base. Carrstone quarrying was evidenced in Trench 13, also immediately to the south of the modern driveway.

Medieval and post-medieval ceramics and metalwork

Green-glazed Grimston Ware from the 12th to 14th centuries is well represented at the site. In addition, in 1989, a watching brief undertaken during construction of the A149 Snettisham bypass revealed a mass of unstratified Grimston Ware just to the south-east of the 'gold field' (NHER 25748).

Medieval metalwork from the BM excavations includes hooked tags and a copper alloy seal. Later finds include a small number of vessel fittings, lead weights and a 17th-century lead seal. Most were unstratified stray finds, though a crotal bell was discovered alongside 17th to 18th-century pot sherds in Trench 15, Feature SA15/2. It is notable that a very large number of 18th and 19th-century buttons were recovered during metal-detecting surveys of the hoard field, as well as a range of coins and tokens which are more varied than might normally be expected (E. Ghey pers. comm.). This suggests that there may have been dumps of more recent material at the site in the 18th to earlier 20th centuries, perhaps due to the use of night soil as fertiliser.

Ex. year	Area	Feature	Type	Phase
1992	Trench 3	SA3/2	Ditch	6
1992	Trench 5	SA5/3	Hollow	?6
1992	Trench 5	SA5/4	Ditch	6
1992	Trench 6	SA6/3A	Ditch	?6
1992	Trench 6	SA6/3B	Ditch	?6
1992	Trench 6	SA6/3C	Ditch	?6
1992	Trench 6	SA6/9	Post hole	6
1992	Trench 6	SA6/11	?Post hole/?animal burrow	?6
1992	Trench 7	SA7/4	Ditch	6
1992	Trench 7	SA7/5	Ditch	?6
1992	Trench 7	SA7/13 (extension to SA7/5)	Ditch	?6
1992	Trench 8	SA8/2	Ditch	6
1992	Trench 11	SA11/3	Ditch	6
1992	Trench 13	SA13/1	Recent disturbance	6
1992	Trench 15	SA15/2	Building debris	6
1992	Trench 16	SA16/2	Ditch	?6
1992	Trench 16	SA16/4	Ditch	?6
1992	Trench 17	SA17/3	Ditch	6

Table 10.1 Phase 6 features

Medieval and post-medieval animal bone

Alan Pipe, Museum of London Archaeology

This section presents the Phase 6 animal bone. For Methodology, see Chapter 7.

Trench 6, SA6/3, ditch

SA/AW included a fragment of fused left-side distal ('elbow') end of cattle *Bos taurus* humerus. There were no tool marks or any other evidence for modification. This material was radiocarbon dated to 1450–1640 cal AD (at 95% probability, see **Table 5.3**).

Trench 7, SA7/5, ditch

SA/GO produced unidentifiable fragments of unidentifiable mammal bone. This material was radiocarbon dated to 1430–1620 cal AD (at 95% probability, see **Table 5.3**).

Trench 7, SA7/7, natural feature (gully) (included here as the infant rabbit bones are likely evidence of modern disturbance)

SA/CT included a fragment of 'cattle-sized' long-bone mid-shaft. There were no tool marks or any other evidence for modification.

SA/DY included single fragments of cattle *Bos taurus* right-side proximal radius and ulna (lower fore-leg), possibly from the same animal. The radius was fused, indicating an animal in at least the second year. There were no tool marks or any other evidence for modification. In addition, there were single fragments of unfused infant right- and left-side rabbit *Oryctolagus cuniculus* radius and right-side femur (upper hind-leg).

Discussion

There is no evidence for immediate post-Roman activity at the site. Ceramic evidence suggests 12th to 14th-century occupation in the vicinity, although no excavated features could be securely dated to this period. The evidence from the 1990–2 excavations suggests that Phase 6 interventions at the site mainly consisted of post-medieval agricultural and drainage activity.

The disturbed state of many of the archaeological features across the site was due to animal burrowing (especially rabbits), and deep ploughing across the hoard field. The infant rabbit bones recovered from gully SA7/7 (see above) are further evidence for the widespread presence of this burrowing animal. From at least the 16th century, an area of common land just south of Ken Hill was used as a rabbit warren (Ch. 3), and there are numerous historical accounts of the problems caused on adjacent agricultural land around Snettisham by escaping rabbits (Whyte 2009, 91–124; Bailey 1988). Extensive disturbance was also noted in the wooded area to the west by Hutcheson (2011). She suggested that this could be due to deliberate destruction of the site and structure, but it is possible that it simply results from later agricultural, drainage, landscaping and animal activity.

Appendix 1
Full List of Contexts from the 1990–1992 Excavations, with Associated Artefacts, Ecofacts and Samples

This appendix provides a full list of contexts from the 1990–1992 excavations, with details of associated artefacts, ecofacts and samples.

Abbreviations
CBM: ceramic building materials
Ex.: excavation
IA: Iron Age
MD: metal detector
Med/PM: medieval or post-medieval
Pot: pottery
Pre: Prehistoric
RB: Romano-British

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1990	Area 1	N/A	Topsoil/subsoil	N/A	x	-	x	-	x	-	-	x	x	x	-	-	N/A
1990	Area 2	N/A	Topsoil/subsoil	N/A	-	-	-	-	x	-	-	x	x	x	-	-	N/A
1990	Area 3	N/A	Topsoil/subsoil	N/A	-	-	-	-	x	-	-	x	-	-	-	-	N/A
1990	Area 4	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	x	-	-	-	N/A
1990	Area 5	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	x	x	-	-	N/A
1990	Area 6	N/A	Topsoil/subsoil	N/A	-	-	-	-	x	-	-	-	-	-	-	-	N/A
1990	Area 7	N/A	Topsoil/subsoil	N/A	-	-	-	-	x	-	-	x	-	x	-	-	N/A
1990	Area 8	N/A	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1990	Area 9	N/A	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	x	x	-	-	-	N/A
1990	Area 10	N/A	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	x	-	-	-	N/A
1990	Area 11	N/A	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	x	x	-	-	-	N/A
1990	Area 12	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	x	-	-	-	N/A
1990	Area 13	N/A	Topsoil/subsoil	N/A	-	-	x	-	x	-	-	-	x	-	-	x	N/A
1990	Area 14	N/A	Topsoil/subsoil	N/A	-	-	-	-	-	x	-	x	x	-	-	-	N/A
1990	Area 15	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	x	-	-	-	N/A
1990	Area 4	Hoard F pit	Pit	N/A	x	-	-	-	-	-	-	x	x	-	-	-	3
1990	Area 1	Hoard G pit	Pit	N/A	-	-	-	-	-	-	-	x	-	-	-	-	3
1990	Area 1	Hoard H pit	Pit	N/A	x	-	-	-	-	-	-	x	-	-	-	x	3
1990	Area 2	Hoard J pit	Pit	N/A	-	-	-	-	-	-	-	x	-	-	-	-	3
1990	Area 6	Hoard K pit	Pit	N/A	-	-	-	-	x	-	-	x	-	-	-	-	3
1990	Area 9	Hoard L pit	Pit	N/A	x	-	-	-	-	-	-	x	-	-	-	-	3
1990	Area 2	SN2	Natural feature (large magnetic anomaly)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1990	Area 2	SN21	Pit	N/A	x	-	-	-	x	-	-	x	-	-	-	-	1
1990	Area 1	SN22	Natural feature (gully)	N/A	-	-	-	-	x	-	-	-	-	-	-	-	N/A
1990	Area 1	SN23	Pit	N/A	x	-	-	-	x	-	-	-	-	-	-	-	1
1990	Area 1	SN24	Pit	N/A	x	-	-	-	x	-	-	-	-	-	-	-	1

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1990	Area 3	SN25	Pit	N/A	x	-	-	-	x	-	-	-	-	-	-	-	2
1990	Area 3	SN26	Pit	N/A	-	x	-	-	x	-	-	-	-	-	-	-	1
1990	Area 3	SN27	Pit	N/A	-	-	-	-	x	-	-	-	-	-	-	-	1
1990	Area 2	SN28	Pit	N/A	x	-	-	-	x	-	-	-	-	-	-	-	1
1990	Area 2	SN29	Pit	N/A	x	-	-	-	x	-	-	-	-	-	-	-	1
1990	Area 7	SN30	Pit	N/A	x	x	-	-	x	-	-	-	-	-	-	-	1
1990	Area 1	SN31	Pit	N/A	-	-	-	-	-	x	-	-	-	-	-	-	2
1991	Wood	Hoard M	MD findspot	N/A	-	-	-	-	-	-	-	x	-	-	-	-	4
1991	?Area 21	Hoard P	Postulated MD findspot	N/A	-	-	-	-	-	-	-	x	x	x	-	-	4
1991	Area 16	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	x	-	-	-	N/A
1991	Area 17	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	-	x	-	-	N/A
1991	Area 18	N/A	Topsoil/subsoil	N/A	x	-	x	-	x	-	-	x	x	x	-	-	N/A
1991	Area 19	N/A	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	x	-	-	-	-	N/A
1991	Area 20	N/A	Topsoil/subsoil	N/A	x	-	x	-	-	x	-	x	x	x	-	x	N/A
1991	Area 21	N/A	Topsoil/subsoil	N/A	x	x	x	-	x	-	-	x	x	x	x	-	N/A
1991	Area 22	N/A	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	-	-	x	-	-	N/A
1991	Area 23	N/A	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	x	-	x	-	-	N/A
1991	Area 24	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	x	x	-	-	N/A
1991	Area 25	N/A	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	x	-	x	-	x	N/A
1991	Area 26	N/A	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	x	x	x	-	-	N/A
1991	Area 27	N/A	Topsoil/subsoil	N/A	x	x	x	-	x	-	-	x	x	x	x	x	N/A
1991	Area 28	N/A	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	-	-	-	-	x	N/A
1991	Area 21	ST35	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	x	N/A
1991	Area 21	ST35	Enclosure ditch	Layer 1	x	-	x	x	-	x	x	-	-	x	x	-	4 to 5

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1991	Area 21	ST35	Enclosure ditch	Layer 2	x	-	x	x	-	x	x	-	-	-	x	-	4 to 5
1991	Area 21	ST35	Enclosure ditch	Layer 3	-	-	-	-	-	-	-	-	-	-	-	-	4
1991	Area 21	ST35	Enclosure ditch	Layer 4	-	-	x	-	-	-	-	-	-	-	-	-	4
1991	Area 21	ST35	Enclosure ditch	Layer 5	-	-	-	-	-	-	-	-	-	-	-	-	4
1991	Area 20	ST36	Enclosure ditch	Layer 1	-	-	x	-	-	-	-	-	-	-	-	x	4
1991	Area 20	ST36	Enclosure ditch	Layer 2	-	-	-	-	-	-	-	-	-	-	-	-	4
1991	Area 20	ST36	Enclosure ditch	Layer 3	-	-	-	-	-	-	-	-	-	-	-	-	4
1991	Area 20	ST36	Enclosure ditch	Layer 4	-	-	-	-	-	-	-	-	-	-	-	-	4
1991	Area 20	ST37	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	x	N/A
1991	Area 25	ST38	Burnt area and flint concentration	N/A	x	-	-	-	-	-	-	-	-	-	-	-	1
1991	Area 25	ST39	Flint concentration	N/A	x	-	-	-	-	-	-	-	-	-	-	-	1
1991	Area 25	ST40	Burnt area and flint concentration	N/A	x	-	-	-	-	-	-	-	-	-	-	-	1
1991	Area 18	Hoard N	Coin scatter	N/A	-	-	-	-	-	-	-	-	x	-	-	-	3
1991	N/A	ST41	Enclosure ditch	Layer 1	x	-	-	-	-	-	-	-	-	-	-	x	4
1991	N/A	ST41	Enclosure ditch	Layer 2	x	-	x	-	-	-	-	-	-	-	-	-	4
1991	N/A	ST41	Enclosure ditch	Layer 3	x	-	x	-	-	-	-	-	-	-	-	-	4
1991	N/A	ST41	Enclosure ditch	Layer 4	x	-	x	-	-	-	-	-	-	-	-	-	4
1991	N/A	ST42	Enclosure ditch	Layer 1	x	-	-	-	-	x	-	-	-	-	-	-	4
1991	N/A	ST42	Enclosure ditch	Layer 2	-	-	x	-	-	-	x	-	-	-	-	-	4
1991	N/A	ST42	Enclosure ditch	Layer 3/4	-	-	x	-	-	-	-	-	-	-	-	-	4
1991	Area 28	ST43	Burnt area and flint concentration	N/A	x	-	-	-	-	-	-	-	-	-	-	-	1
1991	Area 20	ST44	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1991	Area 20	ST45	Enclosure ditch	N/A	x	-	-	-	-	-	-	-	x	-	-	x	4
1992	Trench 1	SA1/1	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 1	SA1/2	Enclosure ditch	Layer 1	x	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 1	SA1/2	Enclosure ditch	Layer 2A	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 1	SA1/2	Enclosure ditch	Layer 2B	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 1	SA1/2	Enclosure ditch	Layer 3	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 1	SA1/2	Enclosure ditch	Layer 4	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 2	SA2/1	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 2	SA2/2	Enclosure ditch	Layer 1	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 2	SA2/2	Enclosure ditch	Layer ?2	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 3	SA3/1	Topsoil/subsoil	N/A	x	-	-	x	-	-	-	-	-	-	-	-	N/A
1992	Trench 3	SA3/2	Ditch	N/A	x	-	x	-	-	-	-	-	-	-	-	x	6
1992	Trench 4	SA4/1	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 5	SA5/1	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	-	-	-	-	x	N/A
1992	Trench 5	SA5/2	Enclosure ditch	Layer 1	x	-	x	x	-	x	-	-	-	-	-	x	4
1992	Trench 5	SA5/2	Enclosure ditch	Layer 2	x	-	-	-	x	x	-	-	-	-	-	-	4
1992	Trench 5	SA5/2	Enclosure ditch	Layer 3	x	-	x	x	x	x	-	-	-	x	-	-	4
1992	Trench 5	SA5/2	Enclosure ditch	Layer 4	x	-	x	-	-	-	-	-	-	-	-	-	4
1992	Trench 5	SA5/3	Hollow/pit	N/A	x	-	-	-	x	-	-	x	-	-	-	x	?6
1992	Trench 5	SA5/4	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	6
1992	Trench 5	SA5/5	Hollow/pit	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?pre-4

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1992	Trench 6	SA6/1	Topsoil/subsoil	N/A	x	-	x	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 6	SA6/2	Enclosure ditch	Layer 1	x	-	x	-	x	-	-	x	-	-	-	-	4
1992	Trench 6	SA6/2	Enclosure ditch	Layer 2	x	-	-	x	x	x	-	-	-	-	-	-	4
1992	Trench 6	SA6/2	Enclosure ditch	Layer 3	x	-	x	-	-	x	-	-	-	-	-	-	4
1992	Trench 6	SA6/2	Enclosure ditch	Layer 4	-	-	x	-	-	-	-	-	-	-	-	-	4
1992	Trench 6	SA6/3A	Ditch	N/A	-	-	-	-	-	x	-	-	-	-	-	-	?6
1992	Trench 6	SA6/3B	Ditch	N/A	x	-	x	-	x	-	-	-	-	-	-	x	?6
1992	Trench 6	SA6/3C	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?6
1992	Trench 6	SA6/4	Natural feature (gully)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 6	SA6/5	Natural feature (scoop/ hollow)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 6	SA6/6	Natural feature (gully)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 6	SA6/7	Natural feature (gully)	N/A	-	-	-	-	-	-	-	x	-	-	-	-	N/A
1992	Trench 6	SA6/9	Post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	6
1992	Trench 6	SA6/10	?Natural feature (pit/ hollow)	N/A	x	-	x	-	-	-	-	-	-	-	-	-	?N/A
1992	Trench 6	SA6/11	?Post hole/?animal burrow	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?6
1992	Trench 7	SA7/1	Topsoil/subsoil	N/A	x	-	-	-	x	x	-	-	-	-	-	-	N/A
1992	Trench 7	SA7/2	Scoop/hollow	N/A	-	x	-	-	x	-	-	-	-	-	-	-	2
1992	Trench 7	SA7/3	Natural feature (gully)	N/A	x	-	x	-	x	-	-	-	-	-	-	-	?
1992	Trench 7	SA7/4	Ditch	N/A	x	-	-	-	x	-	-	-	-	-	-	-	6
1992	Trench 7	SA7/5	Ditch	N/A	x	x	x	-	x	x	-	x	-	-	-	-	?6

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1992	Trench 7	SA7/6	Natural feature (gully)	N/A	x	x	x	-	x	-	-	-	-	-	-	-	?
1992	Trench 7	SA7/7	Natural feature (gully)	N/A	x	-	x	-	x	x	-	-	-	-	-	x	?
1992	Trench 7	SA7/8	Natural feature (gully)	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 7	SA7/10	Pit	N/A	x	-	-	-	x	-	-	-	-	-	-	-	2
1992	Trench 7	SA7/11	Pit	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?2
1992	Trench 7	SA7/12	Pit	N/A	-	x	-	-	-	-	-	-	-	-	-	-	?2
1992	Trench 7	SA7/13	Ditch	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?6
1992	Trench 8	SA8/1	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 8	SA8/2	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	6
1992	Trench 9	SA9/1	Topsoil/subsoil	N/A	x	-	x	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 10	SA10/1	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 11	SA11/1	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 11	SA11/2	Enclosure ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 11	SA11/3	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	6
1992	Trench 12	SA12/1	Topsoil/subsoil	N/A	x	-	x	-	x	-	-	-	-	-	-	x	N/A
1992	Trench 12	SA12/2	Natural feature (gully)	N/A	x	-	-	-	x	-	-	-	-	-	-	-	N/A
1992	Trench 12	SA12/3	Natural feature (gully)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 12	SA12/4A	Animal burrow/?post hole	N/A	-	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/4B	Animal burrow/?post hole	N/A	-	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/5	Animal burrow/?post hole	N/A	-	-	x	-	x	-	-	-	-	-	-	-	?

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1992	Trench 12	SA12/6	?Hearth	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?2
1992	Trench 12	SA12/7	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/8	Animal burrow/?post hole	N/A	-	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/9	Animal burrow/?post hole	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/10	Animal burrow/?post hole	N/A	-	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/11	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/12	Animal burrow/?post hole	N/A	x	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/13	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/14	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/15	Animal burrow/?post hole	N/A	-	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/16	Animal burrow/?post hole	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/17	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/18	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/19	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/20	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/21	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/22	Animal burrow/?post hole	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/23	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/24	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/25	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1992	Trench 12	SA12/26	Animal burrow/?post hole	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/27	Animal burrow/?post hole	N/A	x	-	-	-	x	-	-	-	-	-	-	-	?
1992	Trench 12	SA12/28	Animal burrow/?post hole	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 13	SA13/1	Recent disturbance	N/A	x	-	-	-	-	-	-	-	-	-	-	-	6
1992	Trench 14	SA14/1	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 14	SA14/2	?Enclosure ditch	N/A	x	-	x	-	-	-	-	-	-	-	-	-	?4
1992	Trench 15	SA15/1	Topsoil/subsoil	N/A	-	-	-	-	-	-	-	x	-	-	-	x	N/A
1992	Trench 15	SA15/2	Building debris	N/A	x	-	-	-	-	x	-	-	-	-	-	x	6
1992	Trench 15	SA15/3	Natural feature (tree bowl)	N/A	x	x	-	-	-	-	-	-	-	-	-	x	N/A
1992	Trench 16	SA16/1	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	-	-	-	-	x	N/A
1992	Trench 16	SA16/2	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?6
1992	Trench 16	SA16/3	?Natural feature (Ditch/ gully)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	N/A
1992	Trench 16	SA16/4	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?6
1992	Trench 17	SA17/1	Topsoil/subsoil	N/A	x	x	-	-	-	-	-	-	-	-	-	x	N/A
1992	Trench 17	SA17/2	Enclosure ditch	Layer 1	x	-	x	-	x	-	-	-	-	-	-	-	4
1992	Trench 17	SA17/2	Enclosure ditch	Layer 2	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 17	SA17/2	Enclosure ditch	Layer 3	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 17	SA17/2	Enclosure ditch	Layer 4	-	-	-	-	-	-	-	-	-	-	-	-	4
1992	Trench 17	SA17/3	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	x	6
1992	Trench 18	SA18/1	Topsoil/subsoil	N/A	x	-	x	-	x	-	-	-	-	-	-	x	N/A

Ex. year	Area	Feature code	Feature type	Context	Flint	Other stone	RB pot	RB CBM	Pre pot	Animal bone	Charcoal	IA/RB metalwork	IA coin	RB coin	Furnace debris	Med/PM pot	Phase
1992	Trench 18	SA18/2	Enclosure ditch	N/A	x	-	x	-	-	x	-	-	-	-	-	x	4
1992	Trench 18	SA18/3	Ditch	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 19	SA19/1	Topsoil/subsoil	N/A	x	-	-	-	x	-	-	-	-	-	-	-	N/A
1992	Trench 20	SA20/1	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	-	-	-	-	x	N/A
1992	Trench 21	SA21/1	Topsoil/subsoil	N/A	x	-	-	-	-	-	-	-	-	-	-	x	N/A
1992	Trench 21	SA21/2	?Natural feature (Ditch/ gully)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 21	SA21/3	?Natural feature (Ditch/ gully)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?
1992	Trench 21	SA21/4	?Natural feature (Ditch/ gully)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	?

Appendix 2
Unstratified Flint and Flint Redeposited in Later Features

Peter Makey

This appendix provides a full report of the unstratified flint and flint redeposited in later features at the site. See Chapter 6 for a summary of flint by artefact type as well as a more detailed account of flint from Neolithic features and flint redeposited in Bronze Age and Iron Age features.

Unstratified flint from general areas and fieldwalking 1990–1991

Areas 1–13: 1990 (SN) topsoil and fieldwalking

The flint assemblage recovered during general topsoil stripping during the 1990 season totals 1,043 pieces. This material is from the upper topsoil; once areas were defined, unstratified flint finds were allocated as unstratified in their respective coded areas. This general assemblage is, as might be expected, generally heavily damaged, with extensive evidence of plough damage. There is a surprisingly limited typological range of tools, retouched and utilised pieces amounting to 198 pieces and debitage totalling 845 pieces including cores. There are a few miscellaneous retouched pieces in the topsoil that may come from knives or scrapers. Period-diagnostic implements are scarce although the assemblage is predominately Neolithic.

In the area north-east of the wood, the debitage is very crude with almost 80% showing traces of very heavy battering although in terms of overall state the material looks slightly fresher. There is probably a degree of primary reduction in this area. Much of the discarded debitage here would have been highly suitable for the manufacture of tools such as scrapers. However, there is less selectivity with regard to the quality of the raw material.

SN/EC (in SN19, a pottery findspot to the east of this area) contained a broken flake of fine olive grey (Munsell 5Y 4/1) till flint. Probably Neolithic.

Area 14: 1990 (SN) topsoil and fieldwalking

The topsoil assemblage is nondescript but contains a high proportion of crude flake cores and debitage that is primarily composed of chunky tertiary flakes; only two heavily rolled blades are present. Two chunks are burnt. The cores are heavily battered and show some signs of anvil percussion. There is one fine opposed platform blade core that is also the only patinated example from this area. It is probable that this represents a later Mesolithic or Early Neolithic element. Four scrapers are present, which are all broad end forms. Two single-notched flakes, a spurred flake, a fine un-retouched piercer (defined by use wear) and a broad, flaked finely retouched piercer; SN/JB are present in the assemblage; but most notable is the presence of a small edge-blunted point microlith that is in fine condition. Overall, post-depositional damage is extensive.

Area 15: 1990 (SN) topsoil and fieldwalking

The unstratified material in this area is extensively plough-damaged although breakage is comparably low (<20%), the cores are heavily rolled. There are six small blades and an atypically large (length 56mm, width 18mm) double-crested, utilised blade.

There are probably two separate phases of Neolithic material, a wider variety of flaking techniques being

evident. Notable examples of flaking styles are represented by a fragmentary bi-facially flaked piece and broken glossy trancheform flake. The flake gloss may be related to heat pre-treatment and this is possibly the bi-product of arrowhead manufacture. Evidence of fine platform edge trimming is present on a broken flake from SN/KX. The core rejuvenation flakes are a variety of forms but two examples retain traces of 'chisel-shaped' flake removals suitable for arrowhead manufacture. The scrapers are manufactured on thinner flakes than other areas despite the presence of flake debitage suitable for manufacturing scrapers. A piercer has been fashioned on a flake that is probably the bi-product of flake axe manufacture. Two trimmed flakes in the assemblage may be related to flake knife production.

SN/BC scraping over SN6, a pottery findspot to the west of the area investigated in 1990, produced a crude flake and a worn chunky cortical flake in association with abraded sherds of possible Later Bronze Age pottery.

SN/KC produced a primary flake and a blade that had macroscopic edge wear. The pieces are probably residual.

1991 (ST) Backfill from 1990 excavations

The backfill only contained 40 pieces of flint: 19 flakes/chunks/chippings, one blade, 16 cores, one hammerstone, a piece of battered natural and two miscellaneously retouched pieces. With regard to 1990 topsoil-stripping by box scraper and the area covered this indicates a high recovery rate.

1991 (ST) general fieldwalking

In the general fieldwalking assemblage from 1991 there is a great deal of variation in the degree of plough damage. The tertiary debitage contains a high proportion of blades and bladelets (>50%); they are scarce in the secondary debitage. This trend is also notable in ST/AS (Area 20, fieldwalking) which also contained a notched bladelet. The blade material is a mix of very fresh-looking material and occasional densely patinated (white) multi-crested blades.

The reduction sequence of debitage from the fieldwalking 1990 and 1991 compared:

1) North-east of wood (1990, SN)
Primary = 118 (67%); secondary = 53 (30%); tertiary = 4 (3%)
2) ST Fieldwalking (1991, ST)
Primary = 54 (39%); secondary = 64 (46%); tertiary =22 (15%)

Area 18: 1991 (ST) topsoil and fieldwalking

In group ST/BH the ratio of primary: secondary: tertiary, flakes is different and translates to primary 38%: secondary 41%: tertiary 21%. This material resembles a knapping cluster.

In group ST/BK the debitage is more blade-like.

Area 19: 1991 (ST) topsoil and fieldwalking

The assemblage from this area includes one very large patinated, single-crested flake (ST/BN) and a two-platformed blade core of Mesolithic character, although the majority of the material in this area is of Neolithic aspect.

(ST/BN) primary/cortical debitage is predominant in this group at 51%.

There is a great deal of uniformity in the raw material used to manufacture the scrapers in ST/BN.

Area 20: 1991 (ST) topsoil and fieldwalking

In this area there was a degree of chronologically related spatial patterning although quantification of this is difficult. The material is predominately Neolithic.

ST/BW contained a possible pick that was manufactured on a dark olive-grey flint with a light patina. The piece resembles a very heavily reworked core. The same context also contained a crude possible flake knife.

This assemblage is notable for including a flake from a polished flint axe, a retouched core rejuvenation flake (side platform removal) from a large fine core and a core in group ST/CU. The core is a particularly fine four-platformed blade type (removals, 30mm in length) which possesses two sets of opposed keeled platforms retaining an area of smooth nodular cortex.

Area 21: 1991 (ST) topsoil and fieldwalking

The flint assemblage in this area is predominately composed of crude unclassifiable cores, three of which have been burnt, and comparatively few rejuvenation flakes. Unusually there are no scrapers but a far wider typological range of retouched tools than most of the other areas. The ST/HP assemblage includes a small spherical, cortical flint nodule that has been used as a hammerstone. Probably of later Neolithic date, the assemblage is uniform, with flake debitage being predominately chunky with a high incidence of primary flakes. Traces of burning are limited. Notable pieces include a small utilised flake that possibly comes from the finishing of a flake axe, a possible flint sickle (ST/HP) and a shouldered blade with edge blunting.

Group ST/DY contained three burnt chunks, two primary flakes and a burnt flake with two small areas of nondescript retouch. The pieces are made of coarse-grained local flint and look residual.

Group ST/EY produced just four pieces, all undatable. These comprise three small chunks and a cortical primary flake.

Group ST/HP includes chunky debitage which is mainly from primary and secondary stages of reduction. Plough damage is very extensive on this material. There are four utilised flakes, four utilised blade fragments, a possible axe flake and a flaked flake that may be a bi-product of axe manufacture. The utilised flakes are broad and the blades comprise three medial and one distal fragment that has been snapped and comes from a broader blade that has been extensively rolled. The utilised blade fragments are notable since there is little evidence of blades in this area. In addition to this, one broad flake shows use wear that has not modified its edges. The miscellaneous and edge-retouched pieces are, with one exception, very crude. The retouched component includes a piercer, two single-notched flakes and a double-notched cortical flake worked on the ventral face. Further notable pieces include an invasively flaked, retouched fragment with heavy patina which possibly comes from the manufacture of a single-edged flake knife but has been classed as indeterminate. A retouched flake from this assemblage possesses a heavy use gloss and is probably an

unusual flint sickle, and a crude flake has a very fine serrated edge. This assemblage also contains a shouldered (left-hand side) blade with slight marginal left-hand retouch and oblique left-hand distal retouch. This possibly represents a Mesolithic component of the assemblage, being reminiscent of an edge-blunted blade.

Area 22: 1991 (ST) topsoil and fieldwalking

Group ST/CR: the material from this area is a reasonably uniform mix of broad flakes and regular blade-like flakes with a high proportion of tertiary debitage (40%). Flakes range in length from 20 to 61mm, and in breadth from 12 to 33mm. Most of the raw material is a brownish-grey (Munsell 5YR 4/1) fine-grained till flint. Breakages amount to 18 pieces (17.4%); plough damage is variable and appears to be relatively recent. Only four of the pieces are burnt, two of which are cores. The cores are notably small and two have platforms that have been rejuvenated. There are only seven scrapers, all of which are small. One example is a small (30mm-long) patinated long end scraper with convex retouch on the proximal end of a small bladelet of Mesolithic character. Another crude end scraper is notable for having a pronounced hertzian bulb of percussion, consistent with an indirect knapping technique. There are three utilised pieces in this area, one of which has an old-looking patina. A notable inclusion is a shouldered blade (proximal, left-hand side) with slight right-hand edge retouch.

Area 23: 1991 (ST) topsoil and fieldwalking

There is a degree of conformity in this area with a high ratio (36%) of retouched implements; stylistically almost 70% of the flint is probably of contemporary date. The assemblage is consistent with Middle to later Neolithic flint assemblages. Fine-quality dark olive-grey flint was selected for the majority of the pieces and the quality of knapping is high. Of note is the occurrence of nine notched flakes, one piercer, a serrated-edged bladelet, a spurred flake and a denticulate flake. The notched pieces are crude and include pieces with one, two and four notches. In two instances these have been manufactured on discarded core rejuvenation flakes. In ST/CT there are 20 tertiary flakes which include small flakes and chippings consistent with a knapping assemblage. Of note are some flakes suitable for, or the bi-product of, the production of leaf-shaped arrowheads despite the paucity of such pieces in the collection.

Area 24: 1991 (ST) topsoil and fieldwalking

There is a large topsoil assemblage that has a large proportion of tertiary flakes (58 pieces; 37%) and fine blades and bladelets. Compared to other areas, evidence of burning is limited with only two pieces, a flake and a core, having been burnt. There is a great variation in the cores and the form of the scrapers, although the scrapers tend to be in the smaller size range (<30mm), more characteristic of later Neolithic assemblages. Early Neolithic material is represented by a small collection of patinated blades and core rejuvenation flakes in the topsoil. Notable pieces in the topsoil assemblage are two serrated-edged bladelets, and one serrated-edged blade. There is an unusual flake of oviform shape that is not retouched but has heavy abrasion around all of its lateral edges, consistent with its having been used as a knapping tool. A finely retouched flake scraper fragment looks as though the knapper's intention may have been to produce a leaf arrowhead.

A broad (width 42mm, length 6mm) flake of light olive-grey (Munsell 5Y 6/1) till flint with heavy invasive dorsal flaking may be related to flint axe production.

In group ST/DW there is proportionally a very high ratio (42%) of retouched tools and tertiary flakes; five pieces have been burnt. It is possible that some of the material is Early Neolithic. The Area 24 lithic suite is suggestive of settlement, with the assemblage i looking more 'domestic' than in other areas. Some of the debitage and miscellaneous retouched pieces look like the bi-product of knife manufacture. There is an unusually high proportion of notched flakes (six pieces), all of which appear to have been used. The use wear is consistent with wood-working. The assemblage is similar to adjacent Area H.

Area 25: 1991 (ST) topsoil and fieldwalking

Evidence of hard hammer technique is evident on material from this area; many pieces possess dorsal hinge terminations and dorsal flake and blade scars are frequent.

Most of the material is probably Neolithic although there is probably a small Beaker component exemplified by a small circular side and end scraper from ST/EO. The topsoil assemblage contained a trimmed blade that resembles a large backed blade microlith. The piece is atypical and may be a scarce indicator of a later Mesolithic, Early Neolithic phase of activity on the site. There is a comparative shortage of scrapers in this area although they are present in the topsoil (six examples). In Area 10 there is a noticeable increase in the incidence of macroscopic use wear.

ST/EM: Some of the scrapers here have faceted butts and are broader than many in the other areas. There is a concentration of piercers (four) and notched pieces (seven). Other notable pieces include a crude awl. A further three notched pieces and a flake knife were present in ST/EO. The knife looks more residual than the material from the same context. The bulk of the assemblage is probably Neolithic.

ST/EW: single find of a crude partly bifacially flaked leaf shaped arrowhead of Green's (1980) type.2Bm, with a shallow notch on its left-hand margin that has been formed from the ventral surface. The piece has been manufactured on medium grained olive grey (Munsell 5Y 4/1) till derived flint, with a small degree of dorsal cortex and has been slightly damaged. It appears as though the notch was to aid in hafting. The example is typical of Early to Middle Neolithic assemblages.

Area 26: 1991 (ST) topsoil and fieldwalking

The flint from this area is predominately of Early to Middle Neolithic character, consistent with Peterborough Ware assemblages, with a lesser component of material that looks earlier. Though small, this area appears to have a slightly more varied range of typological implement forms and the occurrence of three awls is noteworthy.

Damage is extensive with almost a quarter of the material being broken. There is a disparity with many of the broken

pieces being proximal ends of pieces. Many of the flakes have hinge terminations. Plough damage is extensive on many of the flints. There is a difference in the colour of the raw material in this area where a slightly more grey-coloured flint predominates. Sixteen pieces including two core fragments have been burnt and the burning appears to be of ancient origin, related to possible domestic activities. There is an increase in the representation of blades and bladelets and a comparatively low proportion of scrapers; indeed, the fieldwalking assemblage from Area 26 only produced three scrapers. One of the scrapers (ST/HG) is notably atypical of the rest of the Ken Hill material, being a small (length 19mm, thickness 43mm) thin cortical scraper of circular form. The flakes are broad, often being over 30mm in width. Notable surface finds are a damaged, unfinished oblique arrowhead and a broken minimally retouched leaf arrowhead (ST/HH). The leaf arrowhead has minimal proximal retouch, although it possesses a fine invasive retouch on the proximal end of a single crested blade like flake. The tip has been broken since deposition. This piece has parallels in the Neolithic assemblage from Hurst Fen, Mildenhall, Suffolk (Clark *et al.* 1960, 220, fig. 13, F32).

The main characteristic of the Area 26 flint assemblages is the large proportion of cores and the comparative lack of associated flakes although over 50% of the flakes are from tertiary stages of core reduction and the presence of arrowheads and knives.

ST/EV contained a finely worked awl, manufactured on a core rejuvenation flake, a miscellaneously retouched chunk and two burnt core fragments. The flakes are mainly primary with pebble cortex.

ST/FB contained a large cortical triple-notched flake, a very large tabular core, and a rejuvenation flake from a three-platformed blade core with traces of flake removals of over 88mm in length.

ST/FC: In this group the flint is predominately of Middle Neolithic aspect with a slight increase in the incidence of dorsal blade scars. ST/FC contains seven blades. Notable pieces include an end scraper with three notches, three piercers, four gravers and a crude fabricator. All the gravers possess traces of heavy utilisation. ST/FC also contained the sole example of a tanged flake that had been manufactured on a plunging core rejuvenation flake. Non-retouched pieces of note include a split core and two hammerstones. One hammerstone is a small spherical (45mm diameter) flint nodule; the other is a small utilised gravel pebble that has received heavy repeated battering. A discoidal core fragment has received miscellaneous retouch.

This group contains a notable piece of non-prehistoric flintwork in the form of a small gun flint; probably from a pistol of 18th to 19th-century date. Rectangular in shape and made by the segmented blade technique, it measures 15 x 22 x 6.5mm with a straight snap fracture to both lateral margins and a hinged butt and a partial dorsal cortex. The gun flint is made of local greyish-brown fine-grained till flint (Munsell 5YR 3/2) with a dark yellowish-orange (Munsell 10YR 6/6) cortex. There is a slight trace of edge usage consistent with firing. The flint is not consistent with the products of the local Brandon gun flint factories.

ST/FD contained no cores despite having rejuvenation flakes. Rejuvenation flakes had in two instances been re-purposed; one being notched and one being used to manufacture a scraper. The debitage totalled 39 pieces including a blade and a bladelet. Notable pieces include a flake knife, a fabricator, a piercer, two denticulate flakes and a notch.

ST/HE was a single find spot for a flake knife or leaf point defined by fine, though minimal invasive parallel, bifacial retouch on proximal and distal ends.

ST/HF was a single find spot for a very fine awl with an elongate point retouched down both of its lateral margins and extensive edge use and tip abrasion.

ST/HG was a single find spot for a small circular scraper (as above).

ST/HH was a single find spot for a broken minimally retouched elongate leaf arrowhead.

Area 27: 1991 (ST) topsoil and fieldwalking

The material from this area is atypical of the Snettisham assemblage and is probably related to the admixture of Neolithic and Bronze Age flint. Four of the flakes bear a very dense white cortication/patination and there is a variation in raw material utilisation. Many of the flints show traces of hard hammer percussion. Almost 5% of the lithic material has been subjected to prehistoric burning. Twenty-one (un-retouched) blades are present in this area's assemblage which is higher than normal; furthermore, the blade material almost conjoins. It is possible that ploughing had only started to disperse material just prior to the excavations.

ST/GO: Crude debitage; mainly tertiary flakes but includes three blades and one bladelet. One of the five cores has been re-used as a hammerstone. One chunk suitable for manufacturing a scraper has been burnt. There is a single extended end scraper with a squared end and two single-notched flakes, one of which also possesses edge use wear.

ST/HM: Four of the scrapers have been manufactured on cores, one of which was a discoidal form. Another atypical feature of the scrapers in this area is an unusual tendency for the retouching having been applied to the bulbar end of flake supports. At least one of the miscellaneous retouched pieces looks like a failed attempt at manufacturing flake knives. A single-edged flake knife is present in the ST/HM assemblage. The implement has fine scalar retouch on its right-hand margin and bears an unusual patination. This piece may represent earlier Neolithic elements. Also in the ST/HM assemblage there is a flake with retouch along two margins, forming a point; it may be coincidental, however, as this implement is more of a later Mesolithic aspect.

Area 28: 1991 (ST) topsoil and fieldwalking

There is a slight variation in the flint raw material selected for knapping in this area; with olive-black (Munsell 5Y 2/1) flint being more frequent than the olive-grey (Munsell 5Y 4/1) that constitutes the bulk of the material. With one exception the cores are very irregular flake forms showing no overall consistency and heavy post-depositional damage. The one exception is a single platformed bladelet core that has been worked all round. This is possibly a Mesolithic

piece. In the topsoil assemblage nearly 58% of debitage comes from tertiary stages of knapping and includes fine finishing/trimming flakes and three trancheform flakes that would be suitable for arrowhead production. There is a low incidence of burning with just two pieces being burnt. Some of the edge-retouched flakes in this area are very broad, one example from the topsoil being 58mm in width. Notable pieces from the topsoil include a crude piercer: a cortical flake that possesses a broad single notch (16mm width, 4mm depth), a spur manufactured on a flat core and a crude flake knife on a broad flake with heavy cortex. A second knife is represented by a proximal fragment of a very fine double-edged flake knife.

A fine, thin oval-plan, double-sided scraper of probable Neolithic date is present in the topsoil.

Another scraper is of unusual elongated-end form being manufactured on the end of a plunging core rejuvenation flake. The piece looks a bit like a fabricator but has use wear consistent with a scraper. The retouched pieces in Area 28 have a lower degree of visible edge use than those in other areas. Of most note is the presence of a failed (during manufacture) later Neolithic oblique arrowhead of Clark's (1934) class G and a heavily worked rod-like fabricator of bi-convex section.

ST/HS: Notable inclusions are three blades and two bladelets, a very crude notched flake, and 18 cores, three of which are burnt. The flakes are very chunky and crude. Eight scrapers are present; these are of varying typological forms but do include a rare denticulate scraper with three denticulations on its left-hand side and end, and right-hand side retouch.

Unstratified and re-deposited flint from 1991 (ST) slots through enclosure ditch

Feature ST41 (1991 slot through enclosure ditch)

ST41 topsoil: Twelve pieces of flint. Two cortical nodule fragments (not cores) show traces of bashing and minimal flake removals; one of which is partially patinated. There are three crude flake cores: two double platformed and one globular unclassifiable. A core fragment has been used as a hammerstone. The debitage is crude and totals three pieces: a cortical chipping, one secondary and one tertiary flake. The retouched component of the assemblage consists of just three pieces: two scrapers and an edge-retouched flake. One scraper is a convex end form on a cortical pebble; the other is a flake scraper with a small area of retouch and post-depositional damage. Both pieces have been used. The edge-retouched flake is a broad flake (30mm width) with a pronounced bulb, minimal retouch and a recent notch that is damage related rather than functional/intentional.

ST/FU (ST41, enclosure ditch, Layer 1): The assemblage comprises two un-retouched flakes: one primary and one secondary in sharp condition. Raw material is fine to medium-grained olive-grey (Munsell 5Y 4/1) and dark yellowish-orange (10 YR 6/6) till flint.

ST/FW (ST41, enclosure ditch, Layer 2): A secondary blade-like flake in very fresh condition with extensive platform crushing. Raw material is fine grained olive-grey (Munsell 5Y 4/1) till flint.

ST/FX (ST41, enclosure ditch, Layer 3): Contained two pieces: a core and a chunk. The core is keeled with three platforms and has been manufactured on a till pebble; olive-black (Munsell 5Y 2/1) with extensive dark yellowish-orange (Munsell 10YR 6/6) cortex. The core has 12 small flake removals (average 18 x 20mm). The material is very fresh.

ST/FY (ST41, enclosure ditch, Layer 4): A small tertiary flake with a fine-trimmed platform. Olive-grey (Munsell 5Y 4/1) flint.

Feature ST42 (1991 slot through enclosure ditch)

ST/FZ (ST42, enclosure ditch, Layer 1): The fill contained only 11 pieces, none of which are period-diagnostic although one piece is probably of an earlier date than the rest. Ten pieces are debitage and one piece is a single-notched flake. Four of the pieces of debitage are small, heavily burnt (calcined) chunks. The un-burnt debitage comprises a crude secondary flake, three tertiary flakes and a chunk, plus an older looking, totally white patinated and rolled flake. A tertiary flake has a shallow notch on its distal end (12mm length by 2mm depth).

ST/GA (ST42, enclosure ditch, Layer 1): The debitage is very crude and chunky, amounting to 24 pieces, plus one fine-crested flake. Eleven pieces of the debitage are burnt. In addition to this an unidentifiable flake core fragment, two pieces of carrstone and a piece of unworked natural flint have also been burnt. A piece of natural has battering. The sole diagnostic implement is a piercer manufactured on the convergence of two snap fractures. Most of the raw material is the coarse-grained flint often found on site. This is probably the crudest of the Ken Hill assemblages.

ST42 at 58cm depth: Below the upper fill the feature contained two pieces: a moderate brown (Munsell 5YR 4/4) chert flake with a slight quartzite cortex and small chunk of lightly burnt flint.

ST45: a broken edge retouched single crested bladelet with superficial resemblance to a microlith; the retouch is on the ventral right and side and is invasive/minimal. The piece is most probably Neolithic and is not in a fresh state.

Unstratified and re-deposited flint from 1992 (SA) excavations

The most noticeable feature of the SA (i.e. 1992) flint assemblages (mostly from the southern part of the site, where the 1992 trenches were opened) is the limited implement range.

There is a slight difference with regards to the raw material in SA, which tends to be light olive-grey or darker in colour, i.e. extremes. There are broader flakes, many hinged, and a mixture of very large and small squat flakes; pieces tend to be broader than they are long. In SA/AC the flakes are different being atypically large and blade-like. The retouched component is low but piercers and gravers are a feature. There is slight evidence for a limited degree of blade production (SA/DF); where present in the stratified contexts blades tend to be proximal and medial fragments (with a few exceptions such as assemblage SA/CJ) the distal ends tend to be missing. Assemblage SA/CJ appears to represent one or two knapping events for the production of blades/bladelets with two flakes conjoining a broken

bladelet; a further two pieces nearly refit. Large blade material is present in SA/BY and SA/KA. In a few instances (e.g. SA/AS) cores are in association with debitage removed from them. In many instances (e.g. SA/EC) there are densely, patinated blades in assemblages of un-patinated material. In a few instances (e.g. SA/AV) there are exceptionally large flakes but by and large these are rare occurrences.

In at least one instance (SA/DF) it appears as though flint has been crushed and/or burnt, probably to provide temper for pottery. Occasionally the assemblages contain large natural cortical nodules of high-quality flint from which a single flake has been removed. A high degree of burning is evident in most of the sealed assemblages. This tends to be more evident on the chunks and chippings and as such is possibly related to the production of flint temper.

The overall incidence of edge utilisation is rare; notable exceptions are a large blade-like flake from SA/AC and two blades from SA/BY.

1992 Trench 1

SA/AA (Trench 1, Feature SA1/2, enclosure ditch): A collection of irregular flakes and three chunks, two of which are calcined (burnt). One flake has an old-looking patina. Retouch includes a graver on a thin flake and a crude piercer. The graver is defined by minimal retouch and use wear. Despite being from a sealed context this material does not look stratified.

1992 Trench 2

SA/AE (Trench 2 topsoil): Nondescript chunky material including a broad flake with utilisation and a very crude scraper manufactured on a previously rolled irregular flake.

1992 Trench 3

SA/AF (Trench 3 topsoil): Primary and secondary flakes; one with a very pronounced hinge termination and excavation damage.

1992 Trench 5

SA/AB (Trench 5, Feature SA5/2, Section A, Layer 1, enclosure ditch): Hinged flake, single-crested bladelet.

SA/AC (Trench 5 topsoil): Variable material includes four cores and a plunging rejuvenation flake. Debitage is a mix of primary, secondary and tertiary flakes, some with pronounced hinge terminations. The flakes are larger than most of the Ken Hill material and blade form. One broad flake (length 33mm, width 34mm) has heavy unidirectional ventral use wear. A flake with a single notch (dorsal, right-hand side) also has traces of use wear on the ventral right-hand side, opposed to the notch. A scraper has been manufactured on the ventral face of a core rejuvenation flake/platform removal.

SA/AH (Trench 5, Feature SA5/2, Section C, Layer 1, enclosure ditch): A collection of crude, irregular material containing a single-platformed core, two broken blades and most notably a 'classic' angle burin. A broken blade and two flakes have an old dense white-coloured patina.

SA/AJ (Trench 5, Feature SA5/2, Section B, Layer 1, enclosure ditch): Mainly small spall-like flakes and crude nondescript cortical flakes and chunks. The assemblage includes a very crude edge-retouched flake and microlith with right hand side retouch.

SA/AK (Trench 5, Feature SA5/2, Section A, Layer 2, enclosure ditch): Tertiary flake.

SA/AL (Trench 5, Feature SA5/2, Section A, Layer 3, enclosure ditch): Convex end and side (right) on a thin flake with a pronounced bulb.

SA/AN (Trench 5, Feature SA5/2, Section B, Layer 1, enclosure ditch): One flake is calcined and looks older. The material is very crude and includes an irregular cortical flake with use wear.

SA/AP (Trench 5, Feature SA5/2, Section C, Layer 1, enclosure ditch): Six nondescript flakes and a very crude flake scraper (right-hand side).

SA/AS (Trench 5, Feature SA5/2, Section D, Layer 1, enclosure ditch): A fresh-looking, fine, two-platformed blade/bladelet core of olive-grey till flint (Munsell 5Y 4/1) in association with a blade that may have come from the core.

SA/AU (Trench 5, Feature SA5/2, Section B, Layer 3, enclosure ditch): Four tertiary flakes.

SA/AV (Trench 5, Feature SA5/2, Section D, Layer 3, enclosure ditch): This assemblage contains the largest/broadest of all the flakes from Ken Hill, measuring 56mm in length by 73mm in width. The flake has an overall light-grey-coloured patination.

SA/AX (Trench 5, Feature SA5/2, Section E, Layer 1, enclosure ditch): Primary and secondary flakes plus a patinated bladelet, an irregular multi-platformed flake core and a crude discoidal core.

SA/AY (Trench 5, Feature SA5/2, Section B, Layer 4, enclosure ditch): Core platform removal with hertzian cone not related to associated tertiary flake.

SA/AZ (Trench 5, Feature SA5/2, Section H, Layer 1, enclosure ditch): Core; side platform removal has edge retouch.

SA/BA (Trench 5, Feature SA5/2, Section H, Layer 2, enclosure ditch): A broad flake has received transverse irregular distal retouch that cuts through a dense white old-looking patination.

SA/BJ (Trench 5, Feature SA5/3, hollow): Includes a very large (length 67mm, width 37mm) tertiary flake with dorsal hinge scars, a large core rejuvenation flake from the side of a platform and a convex extended end scraper (length 38mm, width 35mm).

SA/BK (Trench 5, Feature SA5/2, Section G, Layer 3, enclosure ditch): Contains two flakes, one of which is an atypically broad (length 44mm, width 52mm) tertiary flake, consistent with an Early Neolithic date.

SA/BP (Trench 5, Feature SA5/2, Section F, Layer 3, enclosure ditch): A broken flake and a tertiary bladelet (bladelet broken in excavation).

SA/BZ (Trench 5, Feature SA5/2, Section J, Layer 1, enclosure ditch): A tertiary flake, bladelet and a cortical extended end / horseshoe scraper.

1992 Trench 6

SA/AD (Trench 6 topsoil): Nondescript collection of irregular flakes and chunks includes four cores (one

fragmentary) and most notably a core scraper with two areas of abrupt retouch on a flat tabular core.

SA/BD (Trench 6, Feature SA6/2, Section A, Layer 1, enclosure ditch): Includes an atypical very large (length 78mm, width 31mm) tertiary blade of locally derived coarse-grained flint.

SA/BS (Trench 6, Feature SA6/2, Section B, Layer 2, enclosure ditch): A fresh tertiary bladelet and blade-like flake.

SA/BT (Trench 6, Feature SA6/2, Section B, Layer 3, enclosure ditch): Core rejuvenation flake from the side of a platform and a tertiary flake.

SA/BW (Trench 6, Feature SA6/2, Section C, enclosure ditch): A broad flake and a tertiary flake with utilisation wear on right-hand side.

SA/BX (Trench 6, Feature SA6/2, Section F, Layer 1, enclosure ditch): One flake, a burnt chunk and an atypical flake knife, worked on the ventral surface of a large flake.

SA/CF (Trench 6, Feature SA6/2, Section D, enclosure ditch): A flake and a cortical blade.

SA/CG (Trench 6, Feature SA6/2, Section F, Layer 1, enclosure ditch): Two chunks and a broken flake. The flake looks suited to the manufacture of leaf-shaped arrowheads.

SA/CN (Trench 6 topsoil): Two pieces were calcined; these were a broad hinged flake and a small core platform removal. The remaining pieces were a finishing flake (flake removed near the end of tool production) and a fine extended end/horseshoe scraper. The scraper measures 33.3mm diameter and possesses traces of heavy edge use and ventral trimming.

SA/CO (Trench 6, Feature SA6/2, Section E, Layer 2, enclosure ditch): Includes a small (length 20mm), thin, cortical convex end scraper with almost knife-like retouch.

SA/CX (Trench 6 topsoil): A broken flake and a calcined flint hammerstone fragment.

SA/DW (Trench 6 topsoil): One irregular core plus chunks and flakes. Notable inclusions are a proximal medial fragment from a high-quality single-crested blade, another similar blade fragment (medial) and a fragment from a broad (22mm) blade that possesses an atypical old white patina and fine platform-edge trimming.

SA/EA (Trench 6, Feature SA6/3, Section B, ditch): Blade-like material; broken.

1992 Trench 7

SA/BY (Trench 7 topsoil): This appears to be the product of three separate knapping events, two of which were geared to the production of large blades and one geared to the production of flakes. There is a single multi-platformed core and a primary flake. One broad flake possesses double dorsal blade scars. Four pieces are totally patinated/corticated and a dense white in colour. These comprise two broad flakes, a broken single-crested blade and a denticulate blade. There is fine trimming evident on the platform edges. The notched piece is a single-crested tertiary flake with two small denticulations on the right-hand side, near the distal end. On the ventral surface opposite the denticulations there is a degree of use wear. A fine cortical blade manufactured on fine-grained brownish-black (Munsell 5 YR 2/1) till flint also shows traces of heavy edge use on its left-hand side.

SA/CC (Trench 7 topsoil): Two very broad flakes, one fine and one hinged.

SA/CH (Trench 7, Feature SA7/6, gully): Fifty-two pieces, mainly undiagnostic chunks and chippings although 20 small spalls are present. The chunks are calcined. There is a fragmentary core rejuvenation flake that has been removed from the side of a core. Two retouched implements are present in the assemblage: a single notch on a very large flake and a burin on a cortical flake. The notched flake has a single notch that is particularly well defined by fine retouch and possesses clear and heavy macroscopic traces of edge use. The burin is a classic example defined by a burin spall.

SA/CJ (Trench 7, Feature SA7/5, Section A, ditch): Three cores, two side platform rejuvenation flakes and a collection of small cortical flakes that includes between two and five re-fits onto a fine bladelet fragment (distal medial). The flint is a very uniform collection and also includes a nodule that has had an intentional flake removal.

SA/CK (Trench 7, Feature SA7/3, Section B, gully): The assemblage is an undatable collection of large chunky debitage and small flakes and spalls. Looks like knapping debitage from more than three separate events that has been incorporated into a later feature. It includes primary, secondary and tertiary flakes.

SA/CL (Trench 7, Feature SA7/3, Section A, gully): A nondescript collection of chunky debitage, including two cores and a single notch on a chunk. The material is extensively burnt.

SA/CM (Trench 7, Feature SA7/5, Section B, ditch): Irregular material includes a fragmentary core and a heavily battered chunky flake. There is a small unclassifiable retouched fragment from a scraper and a very chunky blade with edge retouch. One broad flake is atypical and possesses a dense white patination and dorsal blade scars. Two of the flakes have flaked dorsal surfaces.

SA/CP (Trench 7, Feature SA7/4, ditch): A pebble-slice flake, cortical core platform-edge removal and an extended end scraper.

SA/CQ (Trench 7, Feature SA7/5, Section A, ditch): A fine cortical long end scraper with heavy use wear and faceted butt with remnants of core platform.

SA/CR (Trench 7 topsoil): Material almost conjoins. There were probably three parent nodules; the debitage is from primary and secondary stages of reduction. Three of the flakes are heavily calcined (burnt). There are two retouched pieces: a piercer and a graver, the latter being manufactured on a minimally retouched spur of a broken flake.

SA/CS (Trench 7, Feature SA7/5, Section A, ditch): Mixed assemblage; although sealed there is no retouched component although there are two broken bladelet fragments and a heavily burnt core rejuvenation flake taken from the side of a core platform.

SA/CT (Trench 7, Feature SA7/7, ?ditch): Nondescript debitage but includes a large (75mm diameter) sub-spherical flint hammerstone/anvil; extensively battered, the piece has been used as both a hammerstone and an anvil.

SA/CU (Trench 7, Feature SA7/8, Section A, gully): Includes a large secondary flake and a piercer that has been manufactured on the platform of a core rejuvenation flake, via the application of both flake removal and retouch.

SA/CV (Trench 7, Feature SA7/8, Section B, gully): A single tertiary flake.

SA/CW (Trench 7, Feature SA7/6, gully): Mixed inconsistent, small debitage including spalls and two broader dished flakes, a fragment of a keeled flake core, two broken bladelets and a lump that had been battered.

SA/CY (Trench 7, Feature SA7/5, Section B, ditch): Hinged tertiary flake, with post-excavation damage.

SA/DB (Trench 7, Feature SA7/7, ?ditch): A nondescript mix of chippings, broad flakes and three broken crested blade-like flakes. There is a piercer on a chunk that is defined by minimal retouch on a projection.

SA/DC (Trench 7, Feature SA7/5, Section C, ditch): This assemblage is composed of crude flakes, chippings and spalls, many of which have been heavily burnt. The assemblage also includes a natural lump of flint with some battering. There are two blade fragments, and an older looking, patinated core rejuvenation flake, which was removed from the side of a core platform. There are no period-diagnostic pieces.

SA/DE (Trench 7, Feature SA7/6, gully): The material includes three core rejuvenation flakes. One of the rejuvenation flakes is plunging and comes from a bladelet core, one is unclassifiable and possesses a dense old patina and the third is atypically large (length 66mm) and comes from the side of a core platform. A piercer has been formed on a chunky flake by the application of slight retouch.

SA/DF (Trench 7, Feature SA7/8, gully): This assemblage is predominately composed of spalls and chunks, many of which have been burnt. Notable pieces include a broken blade and bladelet (proximal fragments) and a natural lump of flint that has been crushed. One broad broken flake has been utilised.

SA/DH (Trench 7, Feature SA7/5, Section A, ditch): Irregular squat flakes and a core rejuvenation flake from a broad-flake core.

SA/DK (Trench 7, Feature SA7/5, Section A, ditch): Two flakes and two cores. One of the cores is a large broad-flake variety manufactured on a large cortical nodule with a keeled platform.

SA/DL (Trench 7 topsoil): A single small broken tertiary spall.

SA/DM (Trench 7, Feature SA7/10, pit): Includes a broken double-crested blade with a dense white patina.

SA/DN (Trench 7, Feature SA7/6, gully): Irregular chunky flakes.

SA/DO (Trench 7, Feature SA7/5, Section C, ditch): The assemblage includes two primary flakes and is composed mainly of chippings and spalls. Despite being from a sealed context there is a great deal of inconsistency in the debitage. Only three retouched pieces are present: a retouched chunk, a single notch on the ventral of a broken, flaked flake and a denticulate flake. The denticulate flake has two small contiguous notches on the right-hand side of a broad-hinged flake with ancillary platform-edge retouch.

SA/DP (Trench 7, Feature SA7/5, Section C, ditch): Includes one core platform removal and small chunks and chippings, some of which have been burnt (calcined).

SA/DR (Trench 7, Feature SA7/3, gully): A single chunk.

SA/DT (Trench 7, Feature SA7/5, Section C, ditch): Crude material, heavily corticated.

SA/DU (Trench 7, Feature SA7/7, Section B, ?ditch): Looks like the reduction of three separate cores. The assemblage includes a fine edge-utilised blade and an unused burin that has been manufactured on a large core rejuvenation flake. The core rejuvenation flake support is a large platform removal from a fine class A1 flake core.

SA/DX (Trench 7, Feature SA7/8, gully): Chunky debitage with two cores; one large chunk was split during excavation. There is a miscellaneously retouched cortical flake worked on its ventral surface.

SA/DY (Trench 7, Feature SA7/7, Sections A and C, ?ditch): Nondescript chunky flakes, predominately cortical with extensive burning plus two cores (one a keeled fragment) and a fine distal medial blade fragment which has straight left-hand marginal edge retouch. Despite being from a sealed context the material looks of mixed date.

SA/DZ (Trench 7, Feature SA7/5, Section C, ditch): Debitage totals 43 pieces of which over 90% is from tertiary stages of core reduction and includes many small flakes, chunks, two spalls, a broken bladelet and broken large double-crested blade. The material includes a large irregular flake core with at least three platforms, a core platform removal from a smaller core and a slightly retouched side platform core rejuvenation flake. A very large (diameter 64mm) cortical 'pot lid'-type natural fractured flake has received very slight edge utilisation. Two more flakes and a blade have edge use. Only four pieces are burnt (all broken flakes). The raw material is mixed and includes a flaked gravel pebble.

SA/EB (Trench 7, Feature SA7/3, gully): Two tertiary flakes and a chunk.

SA/EC (Trench 7, Feature SA7/5, Section D, ditch): Crude material, mainly chunks with a small overall degree of burning. One of the pieces in the assemblage possesses a dense, old white patina; this is a proximal medial fragment of fine double-crested blade of Early Neolithic character. The assemblage also includes an edge-utilised chunk and blade. A piercer has been manufactured by very minimal retouching of the spur on a broken flake. A crude irregular cortical flake has a small degree of ventral, right-hand side retouch.

1992 Trench 12

SA/DG (Trench 12 topsoil): Very crude material with extensive recent damage, includes a miscellaneously retouched irregular chunky flake and a broad utilised flake, ventral.

SA/DS (Trench 12 topsoil): The cut contained a large assemblage of crude cores of various shapes and sizes, and associated primary knapping debitage of a primarily chunky character. This assemblage appears to be a primary core preparation site. Many of the pieces are of poor quality local raw material. There is a lump of natural from which a single flake has been removed and two cores have been re-purposed as hammerstones, in addition to a small hammerstone flake. There are proportionally few tertiary flakes, notably only four core rejuvenation flakes, which is not surprising viewing the state of the cores; however, the

rejuvenation flakes are of a finer quality than the extant cores and appear to represent the reduction of lithic pieces that may have been used in other areas of the site. All the cores are flake forms; there are few blade scars and no blade debitage. Five pieces are burnt, including two core fragments.

Primary debitage = 30; secondary debitage = 16 pieces; tertiary debitage = 14.

The retouched component is small and includes an edge-retouched core fragment, a denticulate chunk, a crude core that has received a single notch, three scrapers, two small crude end forms, and one unclassifiable. The assemblage also includes a very fine dihedral burin.

SA/DQ (Trench 12 topsoil): Flake debitage is variable with hinged terminations, platform-edge battering and multiple dorsal flaking being present. A small core rejuvenation flake from the side of a platform is not consistent with the debitage. Another plunging rejuvenation flake from a small keeled flake core is retouched as a scraper, with convex retouch to the right-hand side near the striking platform. There is a crude edge-retouched blade (right-hand side), and an edge-utilised flake (broken). Two burins are present. One is formed by a burinating flake removal on the proximal right-hand side of a cortical flake, the other by minimal flaking of a tertiary flake with a hinged termination. A broad cortical flake has two areas of edge retouch. A crude broad (width 45mm) flake knife has been manufactured on a cortical flake with a very pronounced bulb of percussion. The piece has been slightly burnt. A somewhat finer example has fine straight invasive ventral right-hand side retouch with slight dorsal backing and dorsal blade scars. A fine single-crested tertiary blade may be contemporary with the flake knife

SA/KD (Trench 12, Feature SA 12/1 shovel scrape over feature): The scrape produced 20 struck flints; including four chunks, 14 flakes (some are broad) one fine crested blade and a broad edge retouched flake. The condition of this assemblage is variable with some pieces being very fresh looking whilst some are very abraded.

SA/KL (Trench 12, Feature SA 12/16, small pit or animal burrow): The feature contained three small nondescript flakes, one of which was broken and calcined and one had recent (post-prehistoric) edge damage in the form of a notch. The pieces are probably Later Neolithic.

1992 Trench 13

SA/DD (Trench 13 topsoil): Notable is the inclusion of a large cortical nodule (length 80mm, width 60mm) with a single flake removal and a small (length 29mm) pebble-derived battered core.

SA/JV (Trench 18, Feature SA 18/2, ditch, lower fill): A small collection of 15 pieces including one chunk, two chippings, ten flakes (2 of which are broken) a miscellaneously retouched flake and a core (single platformed). The pieces are crude and made of locally derived raw material. Most of the pieces are abraded and do not look consistent with a sealed prehistoric deposit. The core is partially flaked and possesses scars from eight small (average length of removals is 17mm) flake removals. The pieces are of a later Neolithic character.

Part II: The Late Iron Age and Early Roman Hoards

Chapter 11
Introduction to Part II and Summary of Finds by Hoard and Type

Julia Farley and Jody Joy

This second section of the book focuses on the Phase 3 and 4 (Later Iron Age to early Roman) hoards and related stray finds, presenting hoard listings, archaeological contexts and full catalogues of the metalwork and coins. At least 14 securely attested hoards are known from Snettisham. Twelve are torc hoards (A, D, G, H, J, K, L), coin hoards (N), or mixed hoards of torcs and coins (B, C, E, F) from Phase 3. Two date to Phase 4 (ingot hoard M and large mixed coin/object hoard P).

The metalwork assemblage from Snettisham is one of the most exceptional from any Iron Age site in Europe. There are over 1,200 individual pieces in the catalogue (see Ch. 14 and **Table 11.1**), the majority of them torcs. More than 70 complete or near-complete torcs and bracelets have been recovered across the hoards and stray finds (tabulated in **Table 11.2**), with hundreds more represented by fragments. It is notable that none of the broken objects can be linked across hoards. Because many fragments may have derived from a single torc, it is difficult to estimate the precise number of objects. There are at least around 400 tubular and multi-strand torcs and bracelets represented (approximately 350 multi-strand and 50 tubular). The potential total number of torcs and bracelets is closer to 500 if groups of rod and wire fragments which likely derive from similar objects are included. The other significant and unusual group of objects present are simple metal rings, of which there are over 100 examples with at least 50% of the circuit present, and around another 40 smaller fragments.

This chapter summarises the nature and contents of each of the hoards, including information about date of discovery, current location and dating evidence from coins and radiocarbon dating (Gosden *et al.* 2009 see **Table 5.2**). The hoard entries below point to discussions elsewhere in this monograph. A historical account of the earlier discoveries (Hoards A to E) is given in Chapter 4, and detailed stratigraphic information on the hoards excavated by the BM in 1990–1 (including F, G, H, J, K, L, M and N) is presented in Chapter 12. At the end of the chapter, following the hoard-by-hoard breakdown, **Table 11.1** summarises the hoard and stray finds in the BM and NCM collections by object type.

Chapter 13 provides the metalwork typology developed for the study of the Snettisham hoard material. The detailed finds catalogues are found in Chapters 14 (objects) and 15 (coins). The Hoard F helmet (F.445) is a unique object which was the subject of a sustained and thorough conservation campaign, and thus it is singled out for more detailed treatment in the catalogue. Hoard P (a large coin hoard also known as the 'Bowl Hoard') was stolen from the site by illicit detectorists, and the results of attempts to reconstruct its contents are found in Chapter 15, though the coins are not included in the catalogue numbering. The catalogues are organised by hoard, with a final section covering stray finds of metalwork and coins from the site, many of which are probably dispersed hoard material. This is discussed in more detail in the catalogues themselves.

Facing page: photograph of the top of the lower pit of Hoard H, showing torcs H.7 and H.8 *in situ*

Late Iron Age (Phase 3) hoards

Hoard A: Hoard of tubular torcs

Location: NCM

Discovered by ploughing in 1948, with additional fragments recovered during Rainbird Clarke's 1948 excavations (Clarke 1954). See accounts of discovery in Chapters 2 and 4.

- Three near-complete gold alloy tubular torcs (A.1–3)
- At least one fragmentary gold alloy tubular torc (A.4–7)
- Perforated gritstone pebble (A.8)

Hoard B: Hoard of fragmentary multi-strand torcs/ bracelets, with rings, ingots and gold coins

Location: NCM

Discovered by ploughing in 1948, with coins and additional objects recovered during Rainbird Clarke's 1948 excavations (Clarke 1954). See accounts of discovery in Chapters 2 and 4.

Terminal date based on coinage: *c.* 80–60 BC (see Ch. 15)

Coins:

- Eleven gold Gallo-Belgic A and C staters and quarter staters (Cat. nos 1–11)
- One insular British Cf gold quarter stater (Cat. no. 12)

Objects:

One interlinked composite group (B.1a-h) and 27 individual objects and groups of fragments. Together these comprise:

Bracelets:

- Two gold/silver alloy loop terminal bracelets, one represented by fragments (B.8, B.12–13)

Torcs/bracelets:

- Three fragments of gold/silver alloy multi-strand loop terminal torcs/bracelets (B.1e, B.5, B.9)
- Two fragments from copper alloy multi-strand loop terminal torcs/bracelets (B.11, B.17)
- Six neck-ring/body fragments from gold/silver alloy multi-strand torcs or bracelets (B.1f, B.1g, B.2, B.3, B.4, B.7)
- One neck-ring/body fragment from a copper alloy multi-strand torc or bracelet (B.14)
- Two fragments or groups of fragments of gold/silver alloy wire likely from a multi-strand torc or bracelet (B.6, B.10)
- Four fragments of copper alloy wire likely from a multi-strand torc or bracelet (B.15, B.16, B.18, B.19)

Rings:

- Seven gold/silver alloy large rings (B.1a, B.1b, B.20 to B.24)
- Three gold/silver alloy small rings (B.1c, B.1h, B.25)
- One copper alloy small ring (B.1d)

Ingots:

- One gold/silver alloy linear ingot (B.26)
- One gold/silver alloy lump ingot (B.27)

Other finds:

- One copper alloy clamp (B.28)
- Five iron nails (published by Clarke 1954, but now considered most likely post-medieval) (B.29–33)

Hoard C: Hoard of fragmentary multi-strand torcs/ bracelets, with rings, and potin coins

Location: NCM

Discovered by ploughing in 1948, with additional fragments recovered during Rainbird Clarke's 1948 excavations (Clarke 1954). See accounts of discovery in Chapters 2 and 4. Terminal date based on potin coinage: *c.* 60/55 BC (see Ch. 15)

Coins:

- At least 155 potin coins (see Ch. 15)

Objects:

Torcs/bracelets:

- Two gold/silver alloy loop terminal multi-strand torcs/ bracelets, represented by fragments (C.7–18, C.20)
- Three copper alloy buffer terminal multi-strand torcs/ bracelets, represented by fragments (C.22, C.25–7, C.31)
- Two groups of neck-ring/body fragments of gold/silver alloy multi-strand torcs or bracelets (C.1–5, C.21)
- Five groups of neck-ring/body fragments of copper alloy multi-strand torcs or bracelets (C.23, C.24, C.28–30, C.34–6, C.43)
- Two fragments of gold/silver alloy wire or rod likely from a multi-strand torc or bracelet (C.6, C.19)
- Nine fragments or groups of fragments of copper alloy wire likely from a multi-strand torc or bracelet (C.32, C.33, C.37 to C.42, C.44)

Rings:

- Two gold/silver alloy large rings (C.45, C.46)
- One gold/silver alloy small ring (C.47)
- Two copper alloy small rings (C.48, C.49)

Other finds:

- One fragment of gold/silver alloy sheet (C.50)
- Two fragments of copper alloy sheet (C.55, C.56)
- One fragment of copper alloy strip or binding (C.54)
- Three copper alloy rivet heads (C.51 to C.53)
- Five iron nails (published by Clarke 1954, but now considered most likely post-medieval) (C.57 to 61)

Additional material possibly associated with Hoards B/C

Location: NCM

Some parts of Hoards B and C became intermixed shortly after their discovery. Thus, in the catalogue, some finds can be securely attributed to either Hoard B or Hoard C, but others are designated as 'Hoard B/C'). See Chapter 4.

Torcs:

- Three complete loop terminal copper alloy multi-strand torcs (B/C.9, B/C.10, B/C.11)
- One near-complete ring terminal copper alloy small multi-strand torc (B/C.47–9)

Bracelets:

- One complete loop terminal copper alloy multi-strand bracelet (B/C.12)

Torcs/bracelets:

- Four gold/silver alloy loop terminal multi-strand torcs/ bracelets, represented by fragments (B/C.1, B/C.2, B/C.5, B/C.7–8)
- Twelve copper alloy loop terminal multi-strand torcs/ bracelets, represented by fragments (B/C.13, B/C.14–15, B/C.16, B/C.19–22, B/C.24, B/C.25, B/C.26–34, B/C.35, B/C.36, B/C.37, B/C.50–53, B/C.54–5)
- Pair of neck-ring/body fragments from a gold/silver alloy multi-strand torc or bracelet (B/C.3–4)
- Ten neck-ring/body fragments or groups of fragments from copper alloy multi-strand torcs or bracelets (B/C.23,

B/C.42–3, B/C.44–5, B/C.56, B/C.57, B/C.58, B/C.59, B/C.60, B/C.62)
- One wire fragment likely from a gold/silver alloy multi-strand torc or bracelet (B/C.6)
- Eight wire fragments or groups of fragments likely from copper alloy multi-strand torcs or bracelets (B/C.17, B/C.18, B/C.38 to B/C.41, B/C.46, B/C.61, B/C.63)

Rings:
- Twelve copper alloy large rings or fragments of large rings (B/C.65 to B/C.76)
- One gold/silver alloy small ring (B/C.64)
- Seven copper alloy small rings (B/C.77 to B/C.83)

Ingots and lumps:
- One gold/silver alloy triangular ingot (B/C.84)
- Two gold/silver alloy linear ingots (B/C.85, B/C.86)
- One amorphous lump of gold/silver alloy (B/C.87)

Other finds:
- One copper alloy scale pan (B/C.88)
- One copper alloy fitting (B/C.90)
- Two joining fragments of copper alloy binding strip from the corner of a hide-shaped shield (B/C.89)
- One additional fragment of copper alloy binding strip (B/C.95)
- Five groups of fragments of copper alloy sheet (B/C.91 to B/C.94)
- One fragment of slag (B/C.96)

Hoard D: One composite group based around a complete multi-strand torc

Location: BM

Discovered by ploughing in 1950. See accounts of discovery in Chapters 2 and 4.
- One composite group formed of a gold/silver alloy multi-strand loop terminal torc (D.1a) and a silver alloy large ring (D.1b)

Hoard E: One composite group based around a complete multi-strand torc

Location: BM

Discovered by ploughing in 1950. See accounts of discovery in Chapters 2 and 4.

Terminal date based on coinage: *c.* 60 BC (see Ch. 15)

One composite group comprising:

Coins:
- One insular British Cf gold quarter stater coin (Cat no. 169)

Objects:
- One complete gold/silver alloy multi-strand torus terminal torc (E.1a), a gold/silver alloy multi-strand buffer terminal torc fragment (E.1b), and a gold/silver alloy sheet bracelet (E.1c)

Hoard F: Hoard of fragmentary multi-strand torcs/ bracelets, with rings, ingots and gold coins. Many composite groups. Assemblage contained within a copper alloy helmet

Location: BM

Discovery: Located and lifted by Charles Hodder in August 1990. Findspot subsequently investigated by archaeologists during the 1990 BM excavations. See accounts in Chapters 2 and 4, and detailed report in Chapter 12.

Terminal date based on coinage: *c.* 80–60 BC (see Ch. 15)

Radiocarbon dating: The organic core from one Hoard F torc fragment (F.168) gave a date of 370–160 cal BC at 95.4% probability (**Table 5.2**; Garrow *et al.* 2009).

Coins:
- Nine gold Gallo-Belgic A and C staters and quarter staters (Cat. nos 170–178)

Objects:

Hoard F is the largest single object assemblage from Snettisham, containing 47 composite groups (F.1–F.44, F.56, F.62 and F.251, incorporating a total of 142 complete and fragmentary objects), and 396 single objects/fragments. There were no complete, undamaged torcs and bracelets in Hoard F, though there are a handful of near-complete examples, see **Table 11.2**. The copper alloy objects include some gilded pieces, see **Table 11.1**.

Overall, the assemblage comprised:

Torcs:
- Nineteen fragments (or groups of fragments) from gold/ silver alloy multi-strand torcs with known terminal type (buffer: F.41 (part), F.71, F.92–3, F.106, F.115, F.118; cage: F.4a, F.98; loop: F.39 (part), F.78, F.80, F.444; ring: F.4b, F.5c, F.8a, F.68, F.117; torus: F.72; reel: F.119–20)
- Ten fragments (or groups of fragments) from copper alloy multi-strand torcs with known terminal type (buffer: F.162–5, F.168, F.169, F.187, F.202–3; loop: F.186, F.206, F.352–60; ring: F.185; torus: F.207)
- Nine neck-ring fragments (or groups of fragments) from gold/silver alloy multi-strand torcs (F.6a (part), F.74, F.77, F.79, F.96–7, F.99–104, F.109–11, F.112–13, and small torc F.116)
- Six neck-ring fragments (or groups of fragments) from copper alloy multi-strand torcs (F.166, F.167, F.189, F.190–6, F.197–8, F.201)
- Thirty-nine fragments (or groups of fragments) from gold/silver alloy tubular torcs (Type 1: F.1c, F.1d, F.2a, F.4f, F.5g, F.31b, F.33 (part), F.57, F.58. F.59; Type 2: F.63–6; Type 3: F.2g, F.2h, F.35 (part), F.47, F.48, F.60, F.62 (part); Type 4: F.6b, F.30a, F.42 (part), F.45, F.46, F.61; Type 5; F.31a, F.43 (part); Type 4/5: F.2e, F.19b, F.29a, F.32 (part), F.50 to F.56; Uncertain type: F.2c (part), F.49)

Bracelets:
- Two gold/silver alloy bracelets with loop terminals (F.7f, F.121)
- Two fragmentary copper alloy bracelets with loop terminals (F.208, F.209)

Torcs/bracelets:
- Thirty-seven fragments (or groups of fragments) from gold/silver alloy multi-strand torcs/bracelets with known terminal type (buffer: F.146; cage: F.7e, F.38 (part), F.85, F.86, F.95; loop: F.2f, F.3b, F.3h–i, F.4c, F.4d, F.4e, F.7c, F.9b, F.14a, F.17c, F.18h, F.24a, F.70, F.73, F.87, F.89, F.90, F.91, F.136, F.140; ring: F.3c, F.7d, F.7g (part), F.9a, F.10a, F.36 (part), F.40 (part), F.43 (part), F.82, F.105, F.107)
- Fourteen fragments (or groups of fragments) from copper alloy multi-strand torcs/bracelets with known terminal type (buffer: F.179, F.188, F.249; loop: F.3g, F.8b, F.16a–b, F.204–5, F.210, F.256–61, F.326–7, F.361, F.362–3; ring: F.15a; torus: F.351)
- Fifty-five neck-ring/body fragments (or groups of

fragments) from gold/silver alloy multi-strand torcs or bracelets (F.1e (part), F.2d, F.3e, F.5d (part), F.5f, F.6f, F.7g (part), F.9c, F.9d, F.11a–b, F.13b, F.17a, F.20b, F.21b, F.22a, F.29b, F.32 (part), F.34 (part), F.37 (part), F.42 (part), F.81, F.83, F.84, F.88, F.94, F.108, F.114, F.123 to F.131, F.132–3, F.134, F.135, F.137, F.138, F.139, F.141 to F.145, F.147–8, F.151, F.153, F.154–7, F.158 to F.161)
- Fifty-one neck-ring/body fragments (or groups of fragments) from copper alloy multi-strand torcs or bracelets (F.3f, F.13a, F.15b, F.23b, F.44 (part), F.171, F.172, F.173, F.174, F.175–8, F.180–84, F.199, F.200, F.211 to F.217, F.218–40, F.241, F.243 to F.248, F.250 to F.255, F.328–35, F.336–7, F.338 to F.344, F.345–6, F.347 to F.350, F.364–74, F.375, F.376)
- Seven wire fragments (or groups of fragments) likely from a gold/silver alloy multi-strand torc or bracelet (F.7b, F.69, F.75–6, F.122, F.149, F.150, F.152)
- Twenty-one wire fragments (or groups of fragments) likely from a copper alloy multi-strand torc or bracelet (F.170, F.242, F.262, F.263, F.264, F.265–6, F.267 to F.270, F.271–80, F.281, F.282, F.283–8, F.289–90, F.291, F.292–309, F.310–23, F.324, F.325, F.328)

Rings:
- Twenty-eight gold/silver alloy large rings or fragments of large rings (F.1a, F.1b, F.3a, F.5a, F.5b, F.6a (part), F.6d, F.7a, F.19a, F.20a, F.26a, F.28b, F.412 to F.419, F.421 to F.427, F.435
- Three copper alloy large rings or fragments of large rings (F.3d, F.409, F.428)
- Forty-nine gold/silver alloy small rings or fragments of small rings (F.6c, F.6e, F.6g, F.18b to F.18g and F.18j to F.18l, F.21a, F.22b, F.23a, F.24b, F.25a to F.25j, F.26b to F.26e, F.27a, F.27b, F.28a, F.386 to F.397, F.399, F.400, F.401, F.403)
- Seven copper alloy small rings or fragments of small rings (F.404 to F.408, F.410, F.411)
- Four fragments of gold/silver alloy large or small rings: (F.33 (part), F.398, F.402, F.420)

Ingots and lumps:
- Two gold/silver alloy linear ingots (F.438, F.439)
- One copper alloy linear ingot (F.440)
- One amorphous lump of gold/silver alloy (F.436–7)
- One group of small amorphous lumps of copper alloy (F.442)

Other finds:
- One fragmentary copper alloy helmet (F.445)
- Twenty-four Gold/silver alloy wire fragments (or groups of fragments) not obviously from a multi-strand torc/bracelet (F.1e (part), F.2b, F.2c (part), F.2i, F.5e, F.10b, F.12a, F.12b, F.17b, F.18a, F.29c, F.30b, F.33 (part), F.34 (part), F.35 (part), F.36 (part), F.38 (part), F.39 (part), F.40 (part), F.41 (part), F.43 (part), F.44 (part), F.62 (part), F.429)
- Five copper alloy wire fragments (or groups of fragments) not obviously from a multi-strand torc/bracelet (F.14b, F.430 to F.434)
- Four fragments or melted fragments of gold/silver alloy sheet (F.5d (part), F.34 (part), F.37 (part), F.43 (part))
- Two fragments or groups of fragments of copper alloy sheet (F.441, F.443)
- Seven fragments or groups of fragments of gold/silver alloy strip (F.18i, F.67, F.377 to F.381)
- Seven fragments or groups of fragments of copper alloy strip (F.8c, F.8d, F.8e, F.382 to F.385)

Hoard G: Hoard primarily composed of complete multi-strand torcs, with four large rings

Location: BM

Discovery: Located and excavated during the BM 1990 excavations. Split into two pits, one above the other. See detailed report in Chapter 12.

Upper pit (G.1 to G.10):
- Six complete or near-complete gold/silver alloy multi-strand torcs (ring terminal: G.1, G.9; loop terminal: G.3, G.4, G.5a, G.7). G.5a is part of a composite group also including 3 complete gold/silver alloy small rings: G.5b, G.5c and G.5d.
- Three complete or near-complete gilded copper alloy multi-strand torcs (buffer terminal: G.6, G.8, G.10)
- One fragmentary copper alloy multi-strand torc (buffer terminal: G.2)

Lower pit (G.11 to G.20):
- One complete gold/silver alloy multi-strand torc (ring terminal: G.11)
- Two complete or near-complete gilded copper alloy multi-strand torcs (buffer terminal: G.12, G.13)
- One complete or near-complete copper alloy multi-strand torc (buffer terminal: G.15)
- One fragmentary copper alloy multi-strand torc (buffer terminal: G.16)
- One complete or near-complete copper alloy small multi-strand torc (loop terminal: G.14)
- Three complete gold/silver alloy large rings (G.17 to G.19), and one in copper alloy (G.20)

Hoard H: Hoard primarily composed of complete multi-strand torcs

Location: BM

Discovery: Located and excavated during the BM 1990 excavations. Split into two pits, one above the other. See detailed report in Chapter 12.

Upper pit (H.1 to H.6):
- One composite group made of two complete gold/silver alloy multi-strand torcs twisted together (loop terminal: H.2a; ring terminal: H.2b)
- Three complete gold/silver alloy multi-strand torcs (hook terminal: H.3; loop terminal: H.5, H.6)
- Two complete or near-complete copper alloy multi-strand torcs (buffer terminal: H.1; ring terminal: H.4)

Lower pit (H.7 to H.11):
- One complete gold/silver alloy multi-strand torc (ring/torus terminal: H.7)
- Three complete copper alloy multi-strand torcs (buffer terminal: H.8, H.9, loop terminal: H.11)
- One complete gilded copper alloy multi-strand torc (buffer terminal: H.10)

Hoard J: Hoard primarily composed of complete multi-strand torcs

Location: BM

Discovery: Located and excavated during the BM 1990 excavations. See detailed report in Chapter 12.

- Two complete gold/silver alloy multi-strand torcs (ring terminal: J.6, J.7)
- Two fragmentary gold/silver alloy multi-strand torcs (loop terminal: J.1, J.2)
- Two fragmentary copper alloy multi-strand torcs (buffer terminal: J.3; unknown terminal type: J.4)
- A composite group consisting of two fragmentary gold/silver alloy multi-strand torcs (ring terminal J.5b; loop terminal J.5c) and one fragmentary copper alloy multi-strand torc (buffer terminal: J.5a)

Hoard K: Hoard primarily composed of complete multi-strand torcs

Location: BM

Discovery: Located and excavated during the BM 1990 excavations. See detailed report in Chapter 12.

- Two complete or near-complete copper alloy multi-strand torcs (ring terminal: K.1; loop terminal: K.4)
- Two fragmentary gilded copper alloy multi-strand torcs (unknown terminal type: K.2, K.3)
- Three complete gold/silver alloy multi-strand torcs (ring terminal: K.5, K.6. K.7)

Hoard L: Hoard primarily composed of complete multi-strand torcs

Location: BM

Discovery: Located and excavated during the BM 1990 excavations. Split into two pits, one above the other. See detailed report in Chapter 12, and step-by-step excavation images in Chapter 23 (**Figs 23.6–23.8**).

Radiocarbon dating: An untreated sample from an organic repair to torc L.6 gave a date of 370–160 cal BC at 93.8% probability (**Table 5.2**; Garrow *et al.* 2009).

Upper pit (L.1 to L.7):

- Five complete gold/silver alloy multi-strand torcs (loop terminal: L.2, L.4, L.7; ring terminal: L.3; torus terminal: L.1)
- One complete or near-complete gilded copper alloy multi-strand torc (buffer terminal: L.5)
- One complete copper alloy multi-strand torc (buffer terminal: L.6)

Lower pit (L.8 to L.21):

- Ten complete or near-complete gold/silver alloy multi-strand torcs (buffer terminal: L.11, L.12, L.13, L.17; ring terminal: L.18; torus terminal: L.10a, L.14, L.19a, L.20a, L.21a). Four of these are composite groups, incorporating other gold/silver alloy torc/bracelet and wire fragments as additions or repairs (L.10a-b, L.19a-f, L.20a-b and L.21a-b).
- Two fragments of gold/silver alloy multi-strand torcs (cage terminal: L.15; ring terminal: L.16)
- One complete or near-complete copper alloy multi-strand torc/bracelet (loop terminal: L.8)
- One fragment of gilded copper alloy multi-strand torc (loop terminal: L.9)

Hoard N: Dispersed gold coin hoard

Location: BM

Discovery: Recovered as scattered stray finds during metal-detecting survey carried out as part of the BM excavations in 1990 and 1991. See details in Chapter 12.

Terminal date based on coinage: *c.* 80–60 BC (see Ch. 15)

- Nine gold Gallo-Belgic A and C staters and quarter staters (Cat. nos 179–187)

Early Roman (Phase 4) hoards

Hoard M: Hoard of silver/copper alloy lumps

Location: BM

Discovery: Recovered by detectorist Charles Hodder March 1991. Subsequent excavation revealed no archaeological context. See details in Chapter 12.

Radiocarbon dating: Charcoal embedded in the amorphous lumps M.1–M.5 was radiocarbon dated (**Table 5.2**; Garrow *et al.* 2009), giving a calibrated date range of AD 1–130 (at the 95.4% confidence level). The charcoal sampled was old alder wood, so the actual date of the hoard is likely to be somewhat later.

- Five amorphous lumps of silver-copper alloy (M.1–M.5)
- One smaller lump of copper alloy (M.6)

Hoard P: Coin hoard contained within a silver bowl. Possibly accompanied by other objects including ingots

Location: Lost, although silver bowl fragments in the BM may be from this hoard.

Discovery: Stolen from the site by illicit metal detectorists sometime between the 1990 and 1991 excavation seasons. Subsequently dispersed in the trade, and thus its contents can only be partially reconstructed (see accounts of discovery in Chs 2, 4 and 12, and detailed reconstruction of contents in Ch. 15; see also Chadburn 2006, hoard no. 41). All finds lost/dispersed in the trade, except for fragments of the silver bowl.

Terminal date based on coinage: Early AD 60s (see Ch. 15)

Coins:

- *c.* 6,000 silver coins, predominantly local issues
- *c.* 90 to 500 gold coins

Objects:

- Silver bowl (fragments survive, see P.1–P.7)
- Three copper alloy brooches
- Multi-strand torc fragment
- Three 'saucer-shaped' ingots (1 gold alloy, 1 silver alloy, 1 copper alloy)

Table 11.1 Summary of the hoard and stray finds in both BM and NCM collections by object type

Object group	Object type	Gold/silver alloy	Copper alloy (or other materials, indicated in brackets)
MULTI-STRAND TORCS AND BRACELETS	*MULTI-STRAND TORCS/BRACELETS*		
	Buffer terminal torc/bracelet	F.146	C.22, C.25–7, C.31, F.179, F.188, F.249
	Cage terminal torc/bracelet	F.7e, F.38 (part), F.85, F.86, F.95	N/A
	Loop terminal torc/bracelet	B.1e, B.5, B.9, C.7–18, C.20, B/C.1, B/C.2, B/C.5, B/C.7–8, F.2f, F.3b, F.3h–i, F.4c, F.4d, F.4e, F.7c, F.9b, F.14a, F.17c, F.18h, F.24a, F.70, F.73, F.87, F.89, F.90, F.91, F.136, F.140, L.19c, S.11b	B.11, B.17, B/C.13, B/C.14–15, B/C.16, B/C.19–22, B/C.24, B/C.25, B/C.26–34, B/C.35, B/C.36, B/C.37, B/C.50–53, B/C.54–5, F.3g, F.8b, F.16a–b, F.204–5, F.210, F.256–61, F.326–7, F.361, F.362–3
	Ring terminal torc/bracelet	F.3c, F.7d, F.7g (part), F.9a, F.10a, F.36 (part), F.40 (part), F.43 (part), F.82, F.105, F.107	F.15a⁺, L.8
	Torus terminal torc/bracelet	N/A	F.351
	Neck-ring/body fragment with no terminal	B.1f, B.1g, B.2, B.3, B.4, B.7, C.1–5, C.21, B/C.3–4, F.1e (part), F.2d, F.3e, F.5d (part), F.5f, F.6f, F.7g (part), F.9c, F.9d, F.11a–b, F.13b, F.17a, F.20b, F.21b, F.22a, F.29b, F.32 (part), F.34 (part), F.37 (part), F.42 (part), F.81, F.83, F.84, F.88, F.94, F.108, F.114, F.123 to F.131, F.132–3, F.134, F.135, F.137, F.138, F.139, F.141 to F.145, F.147–8, F.151, F.153, F.154–7, F.158 to F.161, S.30, S.45, S.46 (part)	B.14, C.23, C.24, C.28–30, C.34–6, C.43, B/C.23, B/C.42–3, B/C.44–5, B/C.56, B/C.57, B/C.58, B/C.59, B/C.60, B/C.62, F.3f, F.13a⁺, F.15b, F.23b⁺, F.44 (part), F.171⁺, F.172⁺, F.173⁺, F.174⁺, F.175–8⁺, F.180–84⁺, F.199, F.200, F.211 to F.217, F.218–40, F.241, F.243 to F.248, F.250 to F.255, F.328–35, F.336–7, F.338 to F.344, F.345–6, F.347 to F.350, F.364–74, F.375, F.376
	Wire or rod fragments likely from a multi-strand torc or bracelet	B.6, B.10, C.6, C.19, B/C.6, F.7b, F.69, F.75–6, F.122, F.149, F.150, F.152, L.10b, S.41–4, S.47, S.49 to S.65, S.67, S.68	B.15, B.16, B.18, B.19, C.32, C.33, C.37 to C.42, C.44, B/C.17, B/C.18, B/C.38 to B/C.41, B/C.46, B/C.61 B/C.63„ F.170⁺, F.242, F.262, F.263, F.264, F.265–6, F.267 to F.270, F.271–80, F.281, F.282, F.283–8, F.289–90, F.291, F.292–309, F.310–23, F.324, F.325, F.328, S.81, S.82
	MULTI-STRAND TORCS		
	Buffer terminal torc	E.1b, F.41 (part), F.71, F.92–3, F.106, F.115, F.118, L.11, L.12, L.13, L.17, S.19, S.48	F.162–5⁺, F.168, F.169⁺, F.187, F.202–3, G.2, G.8⁺, G.10⁺, G.12⁺, G.13⁺, G.15, G.16, H.1, H.8, H.9, H.10⁺, J.3, J.5a, L.5⁺, L.6, S.79
	Cage terminal torc	F.4a, F.98, L.15	N/A
	Loop or Hook* terminal torc	D.1a, F.39 (part), F.78, F.80, F.444, G.3, G.4, G.5a, G.7, H.2a, H.3*, H.5, H.6, J.1, J.2/S.20, J.5c, L.2, L.4, L.7, S.18, S.21, S.23–9, S.31–40	B/C.9, B/C.10, B/C.11, F.186, F.206, F.352–60, G.6⁺, G.14, H.11, K.4, L.9⁺
	Ring terminal torc	F.4b, F.5c, F.8a, F.68, F.117, G.1, G.9, G.11, H.2b, H.7, J.5b, J.6, J.7, K.5, K.6, K.7, L.3, L.16, L.18, S.16, S.17	B/C.47–9, F.185, H.4, K.1
	Torus or Reel** terminal torc	E.1a, F.72, F.119–20**, L.1, L.10a, L.14, L.19a, L.20a, L.21a	F.207, S.77, S.78
	Neck-ring fragments with no terminal	F.6a (part), F.74, F.77, F.79, F.96–7, F.99–104, F.109–11, F.112–13, F.116, S.22	F.166⁺, F.167, F.189, F.190–6, F.197–8, F.201, J.4, K.2⁺, K.3⁺, S.80
	MULTI-STRAND BRACELETS		
	Loop or Hook* terminal bracelet	B.8, B.12–13, F.7f*, F.121	B/C.12, F.208, F.209
WIRE/ROD	Wire and rod fragments not obviously from a multi-strand torc/bracelet	F.1e (part), F.2b, F.2c (part), F.2i, F.5e, F.10b, F.12a, F.12b, F.17b*, F.18a, F.29c, F.30b, F.33 (part), F.34 (part), F.35 (part), F.36 (part), F.38 (part), F.39 (part), F.40 (part), F.41 (part), F.43 (part), F.44 (part), F.62 (part), F.429, L.19b, L.20b, S.66, S.125, S.132 to S.136 (parts), S.140 (part)	F.14b, F.430 to F.434, S.127, S.128, S.129

TUBULAR TORCS AND BRACELETS	TUBULAR BRACELETS		
	Annular tubular bracelet	E.1c	N/A
	TUBULAR TORCS		
	Type 1	F.1c, F.1d, F.2a, F.4f, F.5g, F.31b, F.33 (part), F.57, F.58. F.59, S.14	N/A
	Type 2	F.63–6	N/A
	Type 3	F.2g, F.2h, F.35 (part), F.47, F.48, F.60, F.62 (part)	N/A
	Type 4	F.6b, F.30a, F.42 (part), F.45, F.46, F.61, S.13	
	Type 5	F.31a, F.43 (part)	N/A
	Type 4/5	F.2e, F.19b, F.29a, F.32 (part), F.50 to F.56, S.11a	N/A
	Type 6	A.1, A.2, A.3, A.4–7	S.12 (iron core only)
	Tubular torc fragment of uncertain type	F.2c (part), F.49, L.19d	N/A
OTHER POSSIBLE TORC COMPONENTS		S.15, S.69	N/A
RINGS	Large ring	B.1a, B.1b, B.20 to B.24, C.45, C.46, D.1b, F.1a, F.1b, F.3a, F.5a, F.5b, F.6a (part), F.6d, F.7a, F.19a, F.20a, F.26a, F.28b, F.412 to F.419, F.421 to F.427, F.435, G.17 to G.19, S.84, S.85	B/C.65 to B/C.76, F.3d, F.409, F.428, G.20
	Small ring	B.1c, B.1h, B.25, C.47, B/C.64, F.6c, F.6e, F.6g, F.18b to F.18g and F.18j to F.18l, F.21a, F.22b, F.23a, F.24b, F.25a to F.25j, F.26b to F.26e, F.27a, F.27b, F.28a, F.386 to F.397, F.399, F.400, F.401, F.403, G.5b, G.5c, G.5d	B.1d, C.48, C.49, B/C.77 to B/C.83, F.404 to F.408, F.410, F.411
	Fragment from large or small ring	F.33 (part), F.398, F.402, F.420, S.86 to S.98	S.99, S.100
INGOTS AND LUMPS	Linear ingot	B.26, B/C.85, B/C.86, F.438, F.439, S.112 to S.116	F.440, S.117 to S.122
	Lump ingot	B.27, S.101, S.102, S.103	S.104, S.106 to S.111
	Triangular ingot	B/C.84	S.105
	Amorphous lump	B/C.87, F.436–7, S.46 (part), S.132 to S.136 (parts), S.137, S.138, S.141 to S.178	F.442, M.1 to M.6, S.140 (part), S.179 to S.233, S.234 (iron)
SHEET/STRIP	Sheet	C.50; F.5d (part), F.34 (part), F.37 (part), F.43 (part), P.1 to P.7, S.70 to S.75, S.139 (part), S.140 (part)	C.55, C.56, B/C.91 to B/C.94, F.441, F.443, S.308 to S.351
	Strip	F.18i, F.67, F.377 to F.381, L.19e, L.19f, L.21b, S.76	C.54, B/C.89, B/C.95, F.8c, F.8d, F.8e, F.382 to F.385, S.276 to S.306, S.307 (iron)
BA/EIA (PHASE 2) OBJECTS		N/A	S.1–10
BEADED AND ROD TORCS/ BRACELETS		N/A	S.83, S.235 to S.241
BROOCHES		S.242	S.243 to S.246
FINGER RINGS		N/A	S.247, S.248
BUTTONS/ RIVETS/RIVET HEADS		N/A	C.51 to C.53, S.249 to S.252, S.267 to S.275
FITTINGS/TOOLS		N/A	B/C.88, B/C.90, S.126, S.253 to S.266, S.352 to S.354
MAIL ARMOUR		N/A	S.355, S.356–9 (iron)
HELMET		N/A	F.445

OTHER/ UNIDENTIFIED		N/A	A.8 (stone), B.28, B/C.96 (slag), S.123, S.124, S.130, S.131, S.139 (part), S.360 to 365
NAILS (LIKELY POST-MEDIEVAL)		N/A	B.29 to 33 (iron), C.57 to 61 (iron)

Notes on **Table 11.1**:
*F.7f has one loop and one hook terminal. The only fully hook terminal object is H.3, which may be unfinished.
**The only reel terminal object is F.119–20.
⁺Gilded or possibly gilded (determined for British Museum objects only)
NB: A dash '–' is used to link groups which are likely to come from the same object. The word 'to' is used to link a run of separate objects in the same category. 'Part' is used to refer to individual components of fused composite groups which include multiple fragments. For simplicity, where multiple interpretations of a single object are possible, it has been assigned to the most likely identification for the purposes of this table.

Table 11.2 Listing of complete and near-complete torcs and bracelets from Snettisham by type (74 objects)

Object type	Cat. nos
Tubular torcs	A.1, A.2, A.3, F.63–F.65
Multi-strand bracelets	B.8, B/C.12, E.1c, F.7f, F.121, F.208, F.209
Multi-strand torc/bracelet	L.8
Multi-strand small torcs	B/C.47–B/C.49, F.116, G.14
Multi-strand torcs	B/C.9, B/C.10, B/C.11, B/C.50–B/C.51, D.1a, E.1a, F.186, F.201, G.1, G.3, G.4, G.5a, G.6, G.7, G.8, G.9, G.10, G.11, G.12, G.13, G.15, H.1, H.2a-b, H.3, H.4, H.5, H.6, H.7, H.8, H.9, H.10, H.11, J.6, J.7, K.1, K.4, K.5, K.6, K.7, L.1, L.2, L.3, L.4, L.5, L.6, L.7, L.10a, L.11, L.12, L.13, L.14, L.17, L.18, L.19a, L.20a, L.21a, S.16, S.17, S.18

Chapter 12
Excavation of the Hoards Recovered in 1990–1991

Julia Farley

These accounts are based closely on the contemporary excavation notes. Descriptions of pit fills are given where recorded. Small soil samples were taken from Hoard pits G, H, K and L. Some small metal fragments were discovered in these samples, but there was no visible evidence for surviving organic remains. Where possible, organic components from the hoards were radiocarbon dated. These instances (in Hoards F, L and M) are noted below.

Late Iron Age (Phase 3) hoards

Hoard F

Hoard F (finds F.1–F.443) was uncovered by detectorist Charles Hodder on 25 August 1990, a mass of gold/silver alloy and copper alloy torcs, bracelets and rings, many of them fragmentary. A stray fragment found just to the west (F.444) is also most likely from Hoard F, disturbed by ploughing. There were nine gold coins (Ch. 15, Cat. nos 170–178), five of them (Cat. nos 174–8) found within tubular torc fragment F.53, which had been folded closed at the ends, and four (Cat. nos 170–3) found within the hoard pit. All are Gallo-Belgic A or C types, most likely minted in the period 100–60 BC (see Ch. 15). The finds had been deposited at the base of a shallow pit in an inverted copper alloy helmet (F.445), which was highly fragmented at the time of discovery. The vast majority of these finds were recovered by Hodder, with some small fragments found during the subsequent excavation.

Radiocarbon dating of an organic core from torc F.168 gave a date of 370–120 cal BC (at 95% confidence; see Chapter 19 and **Table 5.2**).

Figure 12.1 shows a sketch of the hoard pit drawn by Hodder shortly after his discovery, from a letter dated 3 September 1990 (NHER 1487). This is the best-surviving record of the hoard *in situ*. Hodder recalled that the first finds were made around 11–12 inches (0.3m) below the surface, with the pit extending a further 12 inches into the ground. The relevant section of Hodder's letter is worth quoting at length:

> A faint detector sound led me to dig a small hole 11 inches deep, at this depth I observed two twisted strands of what appeared to be gold. This wire did not yield to a gentle pull, it was attached to something below.
>
> Further recovery was carried out only with a pointed piece of wood and my hands in order not to mark or damage any item.
>
> I found no trace of a container lid or cover, the hoard was quite compact, there were no air pockets, just sandy earth and lumps of sandstone.
>
> By the time I had recovered all the items the hole was 24 inches deep, on my way down with the digging a shape appeared around the hole side and I could see there had been a container or vessel. Small pieces [of] green natalic [?metallic] material remained stuck to the sides of the hole, I was able to preserve this shape down to the bottom of where the container had been.
>
> As much as possible of this thin copper sheet (?) was recovered but it was very brittle and I could not find any large pieces.
>
> The bottom of the hole was neat, appeared to be slightly smaller in diameter than the upper part of the container, also the bottom was flat and seemed deliberately made so, with

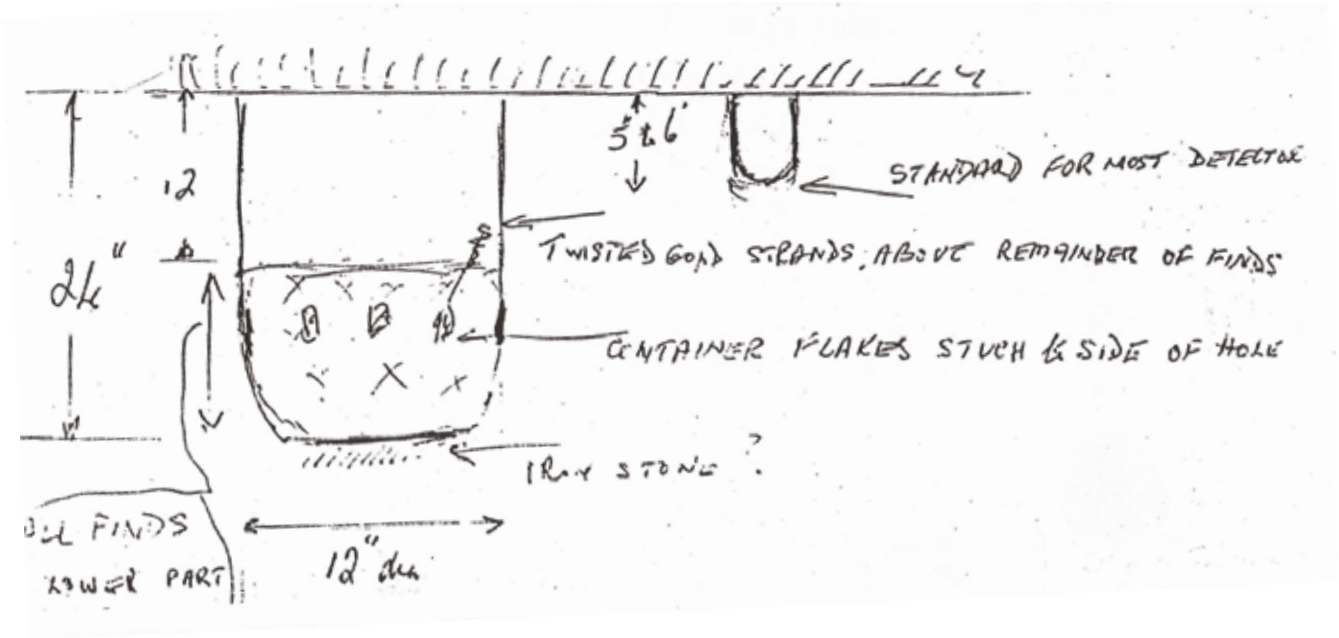


Figure 12.1 Sketch of Hoard F pit in section, made by Wing Commander Hodder shortly after he excavated the finds

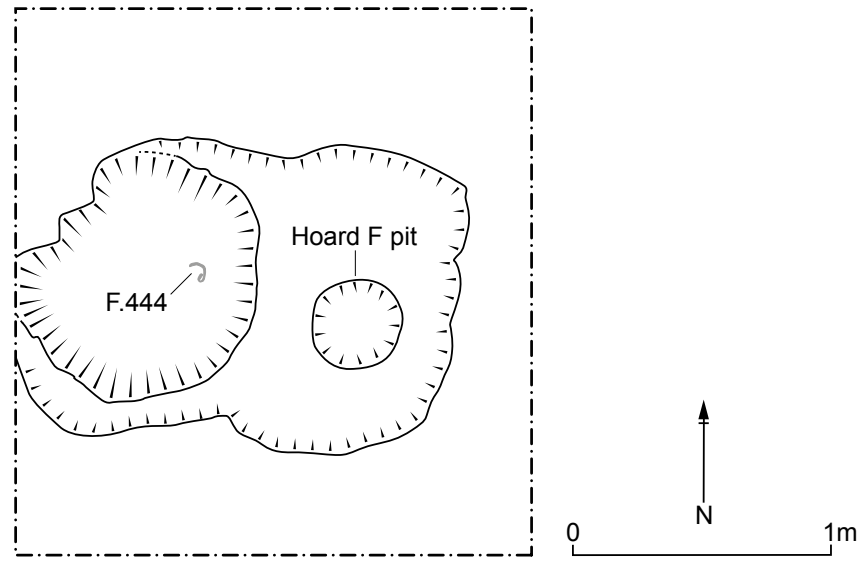
> pieces of sandstone fitted together. If the archaeologists wish to see this no doubt I can uncover the hole, providing it is done before being ploughed. I do not know when it will be plowed [sic] again. I found no trace of the container bottom. In removing the items, which lasted over one hour, I left all the intreloched [?interlocked] items just as I found them.
>
> I returned home feeling very pleased with this fantastic collection of Iron Age craftsmanship, I shall be sorry when the archaeologist comes to collect them today, I will still have the satisfaction of knowing they will be in a display for all to see.
>
> The finds were washed in soapy water only, no other cleaning was carried out.
>
> When cleaning I found a short piece of damaged torc tube which rattled, on opening one end five gold coins came out.
>
> Extract from Hodder's letter dated 3 September 1990 (NHER 1487).

Hodder was confident that he had discovered the base of the original pit, with the description of the base as, 'flat and… deliberately made so, with pieces of sandstone fitted together', most likely a reference to the natural carrstone into which the pit was cut. The helmet (F.445) was highly fragmentary, but the suggestion from Hodder's account of the 'container', flakes of which were stuck to the side around the pit, is that it was at least partially complete when placed into the ground, and had been used to contain the hoard. This is discussed in more detail in the catalogue entry in Chapter 14, which outlines the conservation and reconstruction of the helmet. Hodder noted that he 'found no trace of the container bottom', and indeed it has not proved possible to reconstruct the crown of the helmet, so it is possible that the metal in this area was damaged or missing before deposition. In this case, rather than holding the hoard, the helmet might simply have been placed into the pit first, inverted. The other finds were largely fragmentary, with few complete objects, and over 40 composite assemblages formed from multiple fragments interlinked, looped, inserted or fused together (Chs 13, 20, 21).

The finds recovered by Hodder were eventually taken to the British Museum. Ralph Jackson, Romano-British Curator in the then Department of Prehistoric and Romano-British Antiquities, produced a catalogue of the finds in preparation for the Treasure Trove inquest. Metal analysis was undertaken by Duncan Hook of the British Museum Research Laboratories. Jackson listed 595 artefacts and a total of 501 numbers were assigned (as the sheet fragments were all assigned one number). The total weight of the artefacts was 9.1815kg, excluding the coins and vessel fragments. The preparatory work by Jackson and Hook was an invaluable aid to the preparation of the present volume, and the numbers assigned by Ralph Jackson are included in the concordance.

The area was subsequently investigated by Stead and his team. A 2m by 2m trench was opened up over the findspot of the hoard. Hodder's pit was easily located. As re-excavated it was 0.35m in diameter, with a base 0.52m below the modern ground level. It had been overcut, and there were no traces of the original sides. Although Hodder did not recover finds from the upper levels, when soil from the pit and surrounding surface was sieved, many small fragments were recovered. (These are F.153, F.212, F.213, F.214, F.226, F.282, F.306. F.307, F.316, F.322, F.324, F.338, F.340, F.344, F.352, F.382, F.411, F.421, F.432, F.441, F.442, F.443, and parts of the helmet F.445.) An additional torc fragment (F.444) was found just to the west of the other finds, 0.45–0.50m from the edge of the pit. This fragment was found at a depth of 0.26m, placing it towards the bottom of the plough soil (which was around 0.30m deep). Stead concluded that it had most likely been moved by ploughing, and it does seem likely that the top of Hoard F had been truncated in this way. This would explain Hodder's discovery of a small number of 'twisted gold strands' above the main hoard deposit which contained all the other finds (**Fig. 12.1**). Some of the stray finds from the surrounding area may also have originated in Hoard F.

The plan and profile (**Figs 12.2–4**) show the area disturbed by metal-detecting activity, Hodder's pit, and



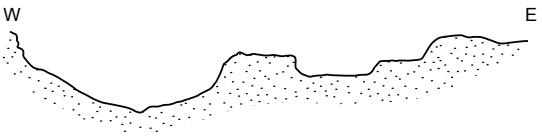


Figure 12.2 (top) Plan of Hoard F trench after excavation and removal of finds

Figure 12.3 (bottom) Sketch profile of Hoard F trench, after truncation of topsoil

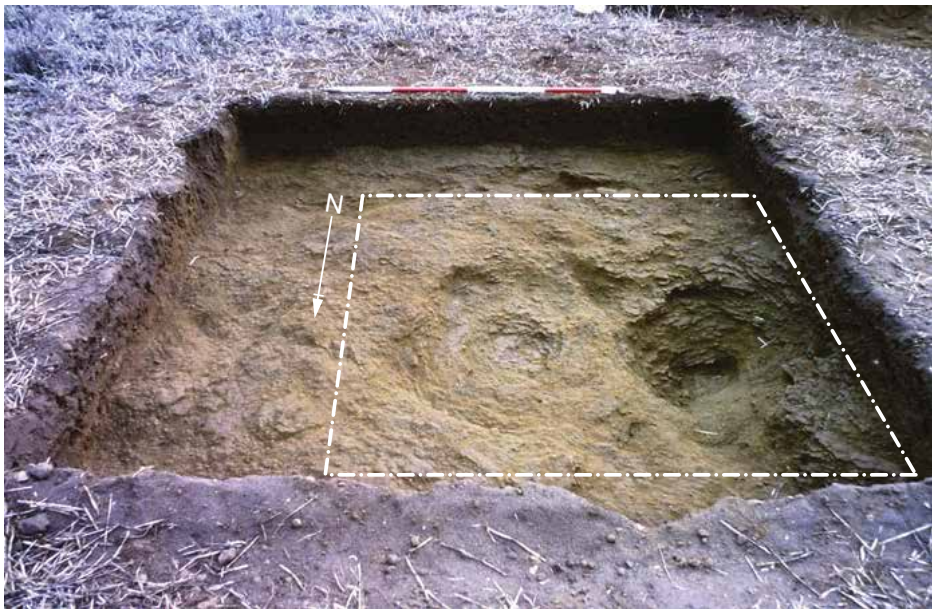


Figure 12.4 Photograph of the Hoard F trench (looking south). Taken after excavation, including extension of trench to the east and south

what Stead interpreted as a tree bowl, around 0.9m in diameter, just to the west. Aside from F.444, which was found at the base of the plough soil, there were no finds from this other hollow, so it does not seem likely to have been a hoard pit.

Hoard G

Hoard G was discovered by Hodder, using his metal detector, on 19 November 1990. Hodder lifted the uppermost torc, G.1, before it was recorded by archaeologists. Fragmentary copper alloy torc G.2, beneath, may also have been disturbed during the initial discovery. The pit was then exposed by the archaeologists, and the torcs planned *in situ* before further lifting.

Figures 12.7–10 show the torcs from the upper pit of Hoard G *in situ*. There was a great deal of overlapping of the torcs, most likely suggesting that G.8 and G.10 were deposited together; then G.9, G.6, and G.5, in turn; then G.3, G.4 and G.7 together, intertwined, with G.2 presumably placed on top followed by G.1 (**Fig. 12.11**). After G.1–G.10 had been removed, there was a fairly clear earth surface with only a small number of copper alloy fragments visible. However, Hodder's metal detector recorded a strong signal and so the base of the pit was further explored, revealing a second group of torcs beneath. These are shown in **Figures 12.12–16**. The most impressive torc in the hoard (G.11) was uppermost in this lower section of the pit. Immediately beneath were a group of copper alloy torcs (G.12–G.16)

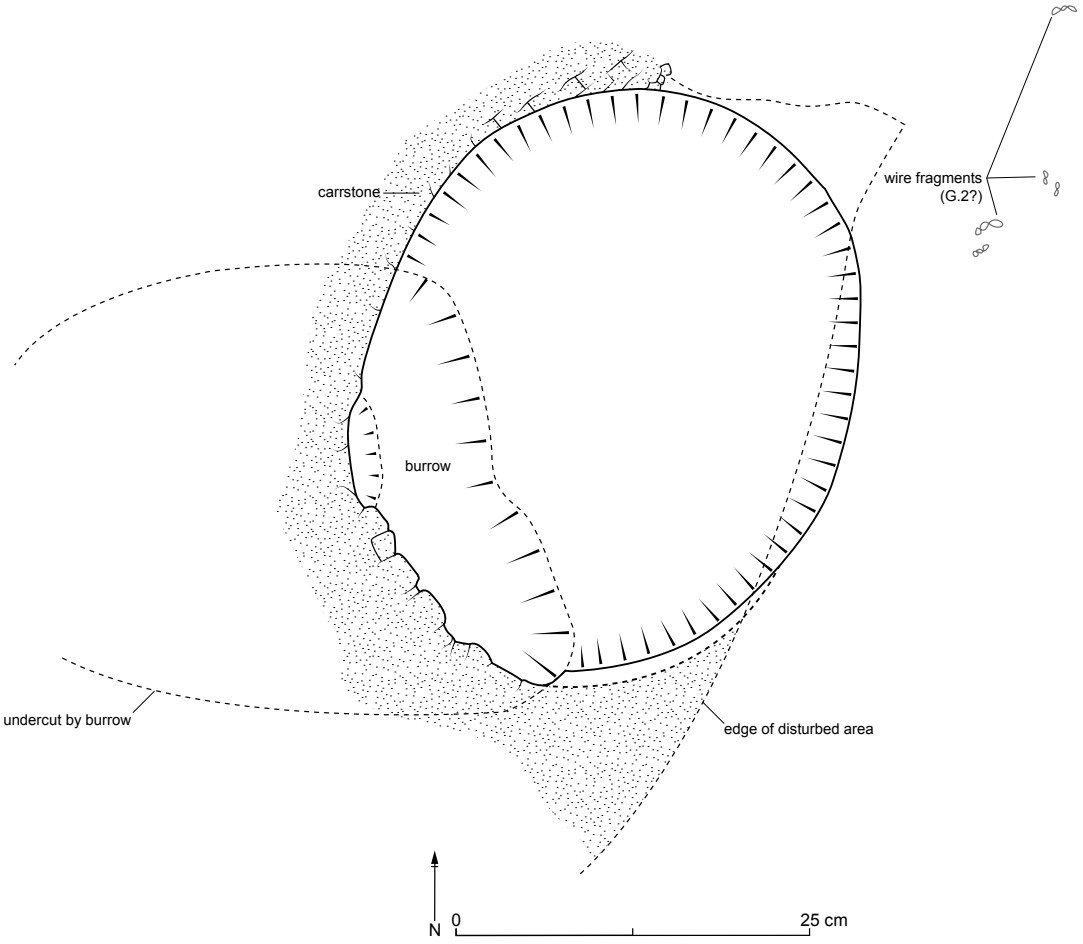


Figure 12.5 Plan of Hoard G pit after excavation and removal of artefacts

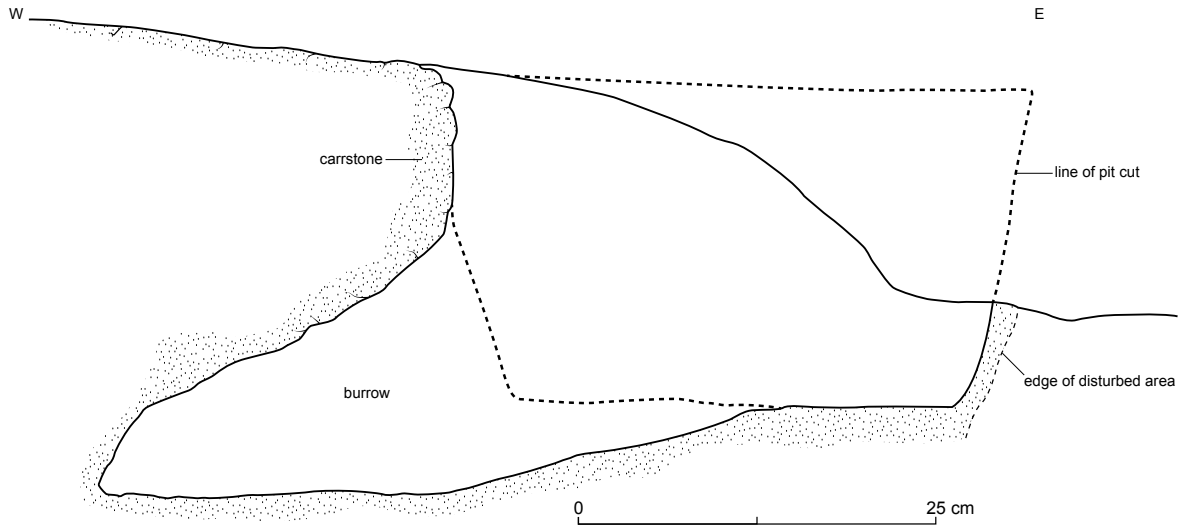


Figure 12.6 Section through Hoard G pit after excavation and removal of artefacts

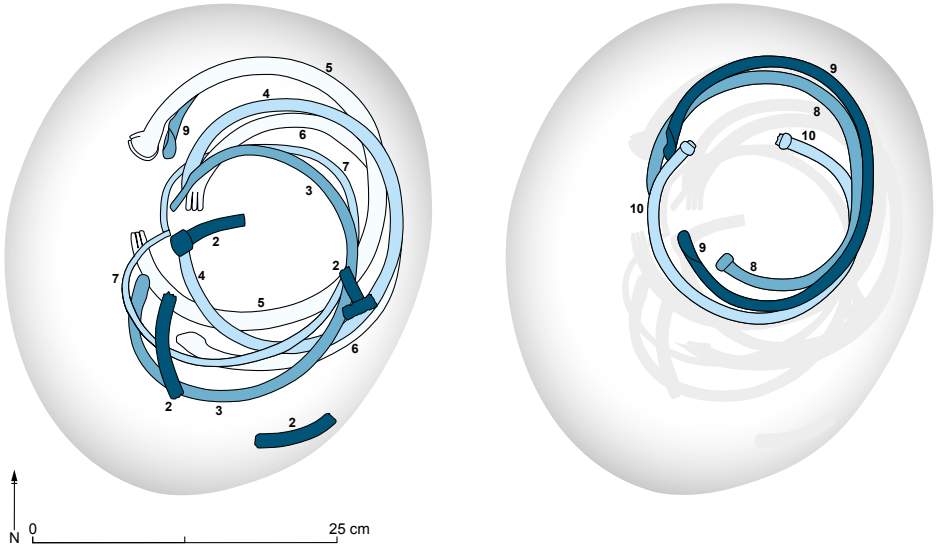


Figure 12.7 Hoard G upper pit torc overlay drawings, showing torcs G.2–G.10 (the uppermost torc, G.1, was removed before planning)

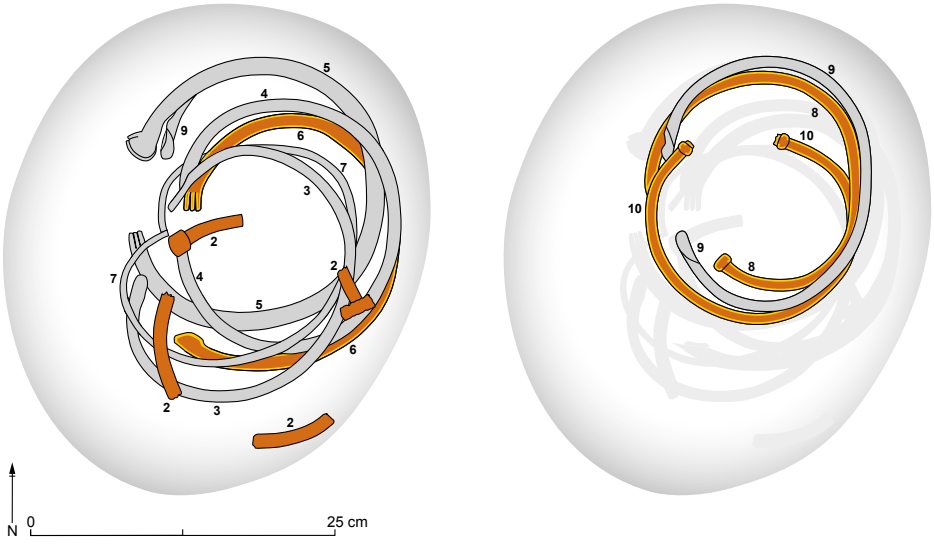


Figure 12.8 Hoard G upper pit torc overlay drawings, colour-coded according to surface metal content (for key see Fig. 23.5)

Figure 12.9 Photograph of the upper pit of Hoard G, showing torcs G.3–G.10 *in situ*

Figure 12.10 *In situ* detail photograph showing the complex interrelationship of torcs G.3–G.10

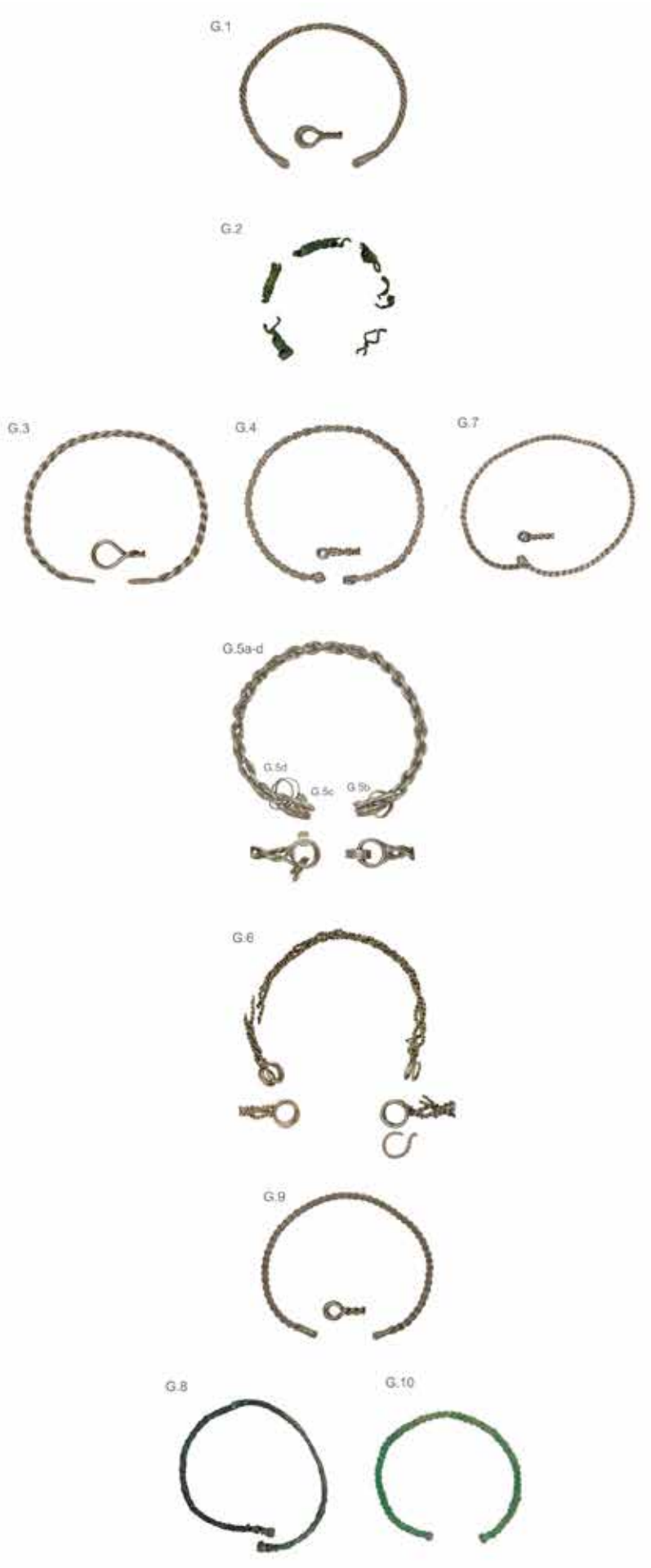


Figure 12.11 The order of deposition of torcs in the upper pit of Hoard G. The torcs at the bottom of the image were deposited first. Torcs displayed at the same level were deposited together

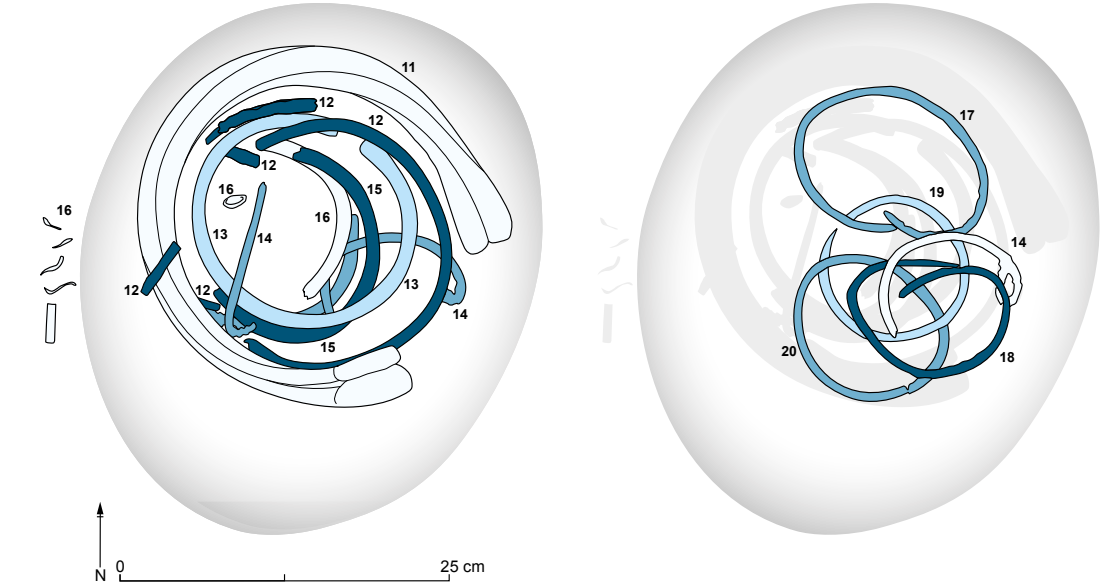


Figure 12.12 Hoard G lower pit torc overlay drawings, showing objects G.11–G.20

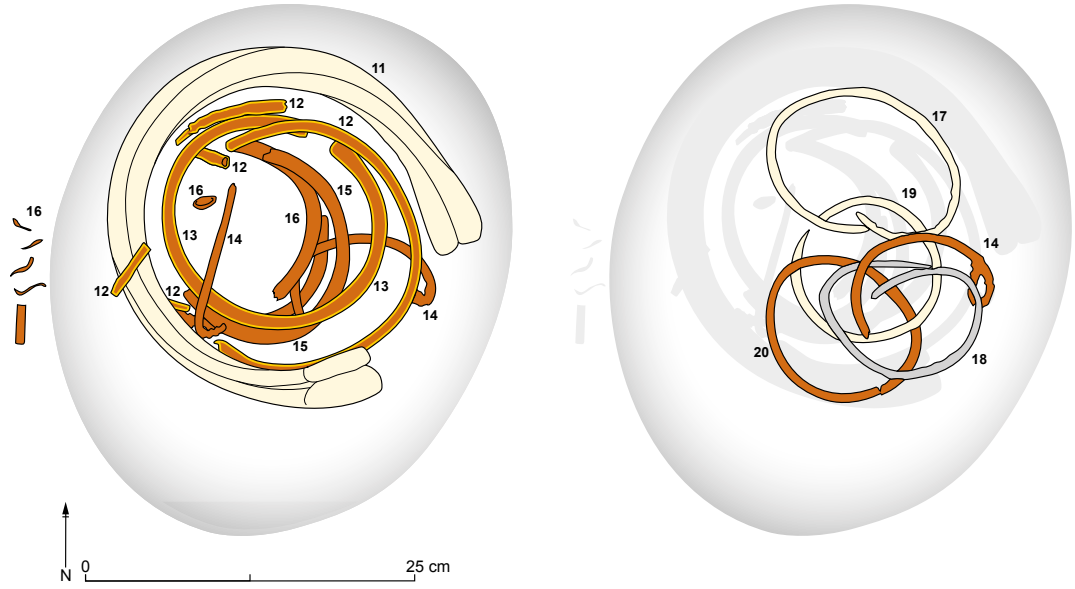


Figure 12.13 Hoard G lower pit torc overlay drawings, showing objects G.11–G.20, colour-coded according to surface metal content (for key see Fig. 23.5)

Figure 12.14 Photograph of the middle of the Hoard G lower pit, showing copper alloy torcs G.12–G.16 *in situ*, with large penannular rings G.17–G.20 beginning to be uncovered

Figure 12.15 Photograph of the bottom of the Hoard G lower pit, showing large penannular rings G.17–G.20 *in situ*

Figure 12.16 Photograph of the top of the lower pit of Hoard G, showing large gold/silver alloy torc G.11 *in situ*, with copper alloy torcs G.12–G.16 beginning to be uncovered

which were severely corroded and had been heavily disturbed by animal burrowing. These torcs were complex to interpret because of their poor level of preservation, and a full understanding was only possible after conservation work had been carried out (hence the slight differences here from Stead's interim report, Stead 1991a). There were torc fragments in disturbed ground up to 0.2m from the edge of the pit and also in the animal burrow itself, well below the surface of the carrstone. The majority of the damage seems to have been caused by animal burrowing, but not everything could be blamed on animal disturbance. G.13 is reasonably complete, but missing a terminal, the end of the neck-ring having been 'repaired' with an organic 'string'. G.16 is also missing a terminal and shows an organic repair, and in this case little enough of the torc survives to suggest that it may well have been incomplete when deposited. Two other torcs (G.14 and G.15) were each found in two main parts, and the angle of the pieces in the ground strongly suggests that they were deposited this way. The two pieces of G.15 were superimposed, one on top of the other, as if it was placed into the ground folded over on itself, whilst one part of G.14 was at the base of the pit and the other, projecting upwards, was at the top of the lower group. At the very base of the pit were a group of four large penannular rings (G.17–G.20) which were in good condition. Two were interlinked, and it is possible all four were placed as a group. **Figure 12.17** shows the order of deposition as far as it can be reconstructed.

Figures 12.5–6 show the plan and section of the pit after complete excavation and removal of the artefacts. The hoard pit was 0.27–0.34m across and 0.45m deep below the ground level, cut 0.18m into the carrstone. The section shows the heavy disturbance of the west side of the pit by animal burrowing. There is no evidence for two cuts, so it seems most likely that after the pit was dug, objects G.11–G.20 were deposited first, the pit was partially backfilled, and then torcs G.1–G.10 were placed into the pit before it was fully backfilled.

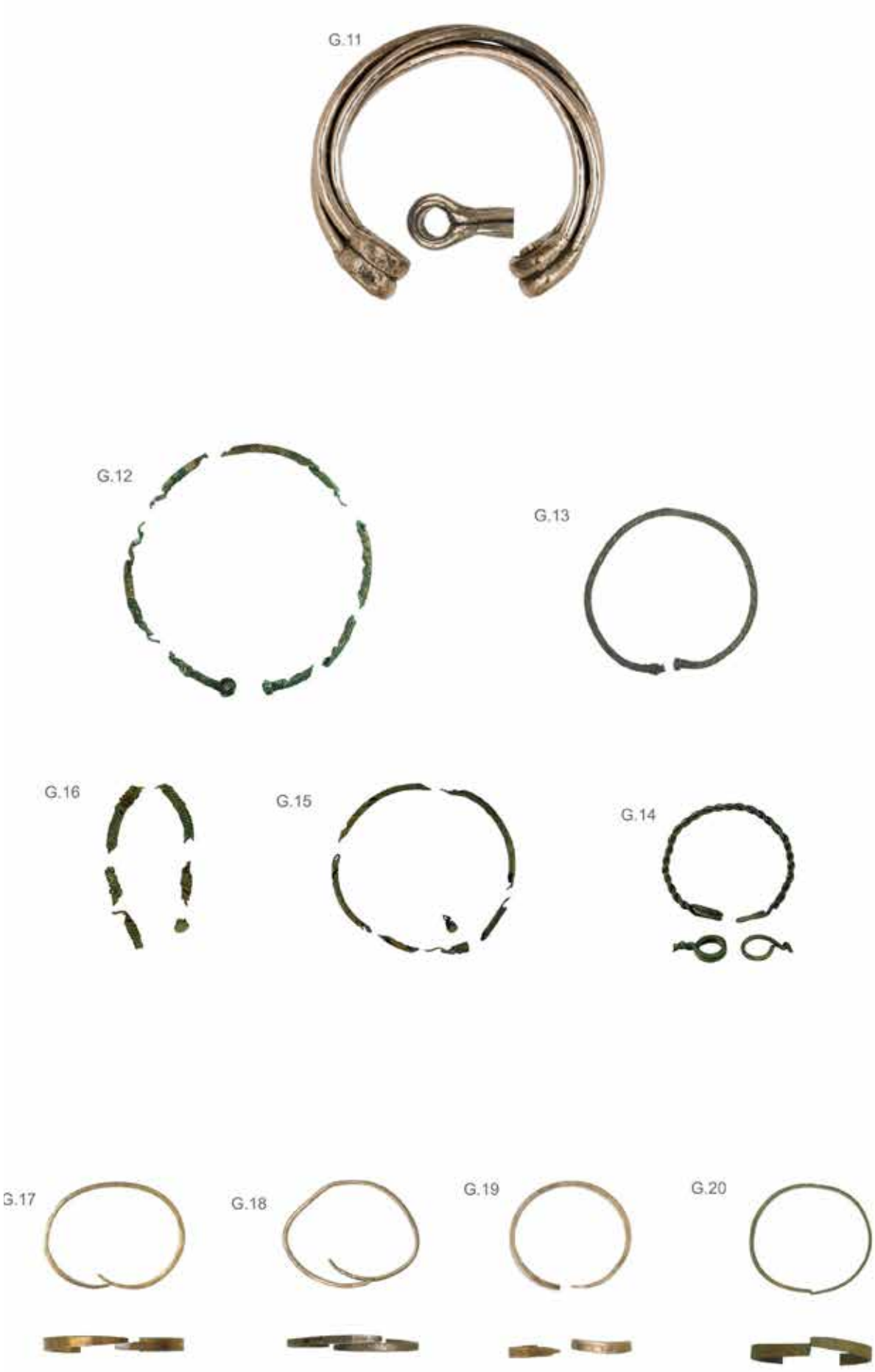
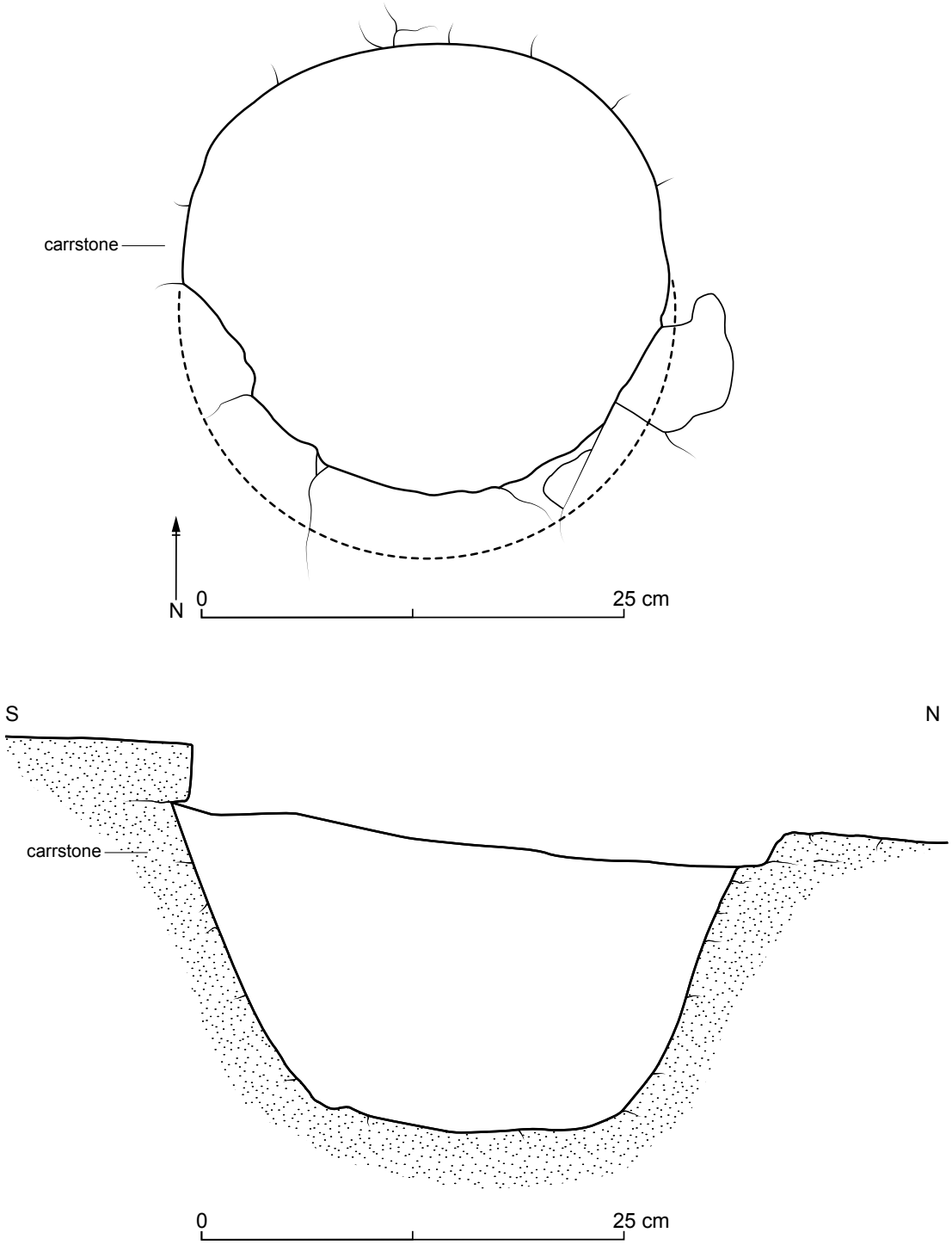


Figure 12.17 The order of deposition of torcs in the lower pit of Hoard G. The torcs at the bottom of the diagram were deposited first. Torcs displayed at the same level were deposited together, or their order of deposition cannot be discerned



Figures 12.18 and 12.19 Plan of Hoard H pit after excavation and removal of the majority of the torcs (above) and section through Hoard H pit after excavation and removal of the artefacts (below)

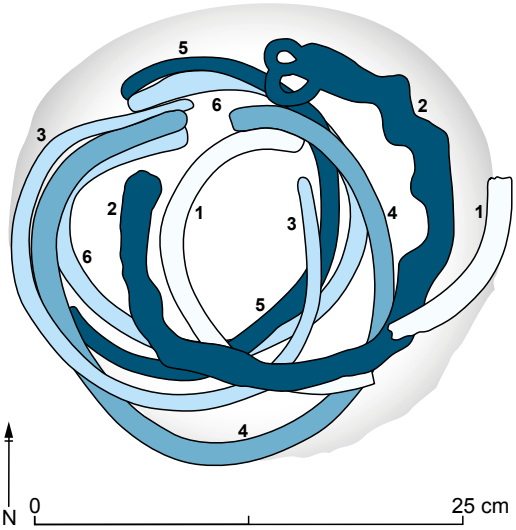


Figure 12.20 Hoard H upper pit torc overlay drawing, showing torcs H.1–H.6

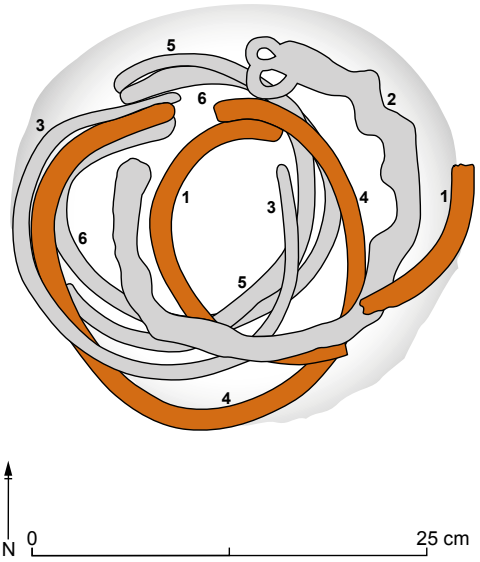


Figure 12.21 Hoard H upper pit torc overlay drawing, showing torcs H.1–H.6, colour-coded according to surface metal content (for key see Fig. 23.5)

Figure 12.22 Photograph of the top of the upper pit of Hoard H, showing torcs H.1–H.6 *in situ*

Figure 12.23 Photograph of the bottom of the upper pit of Hoard H, showing torcs H.5 and H.6 *in situ*

Hoard H

Hoard H was also discovered by Hodder during metal-detecting on 19 November 1990, but in this case it was undisturbed. **Figure 12.18** shows the plan of the pit before removal of the torcs nearest the base (H.9–H.11) and **Figure 12.19** shows the section of the pit after complete excavation and removal of all artefacts. The pit was 0.22m diameter at the top, and cut about 0.16m into the natural underlying rock. The sides of the pit sloped, giving a narrower base, around 0.15m in diameter.

Like Hoard G, there were two distinct levels in the pit. There were six torcs, H.1–H.6, in the upper deposit (**Figs 12.20–3**), with the lower four in this upper group seemingly placed one by one (H.6, H.5, H.4 and then H.3), followed by H.1 and H.2a-b being placed together. H.1 and H.4 are copper alloy torcs, whilst the remaining four are precious metal torcs with a silverish surface colour. H.2a-b is a composite group made from two separate torcs twisted together. **Figure 12.24** shows the order of deposition.

Five torcs comprise the lower deposit (**Figs 12.25–30**). As in Hoard G, the uppermost torc in the lower half of the pit (here H.7) was the most visually impressive of the group and the one with the highest gold content. H.7 had been compressed slightly by the person who deposited it, terminals overlapping to fit into the small pit. Once it was removed by the excavators, this compression was released and it sprang open, back to its original shape. Below H.7 were four copper alloy torcs (H.8–H.11). All were heavily corroded and H.8 and H.9 had broken, but they appear to have been more or less complete when deposited. H.11, the simplest torc of the group, had been placed at the base of the pit first, followed by H.9 and H.10 together, then H.8, and finally H.7 (**Fig. 12.31**). As with pit G, the suggestion is that a single pit was dug, the first group of torcs interred, a small amount of soil backfilled, and then the upper deposit laid. The evidence does not allow a clear estimation of the time that elapsed, except to say that there was no evidence for a period of silting, suggesting that the second hoard was most likely buried not long after the first.

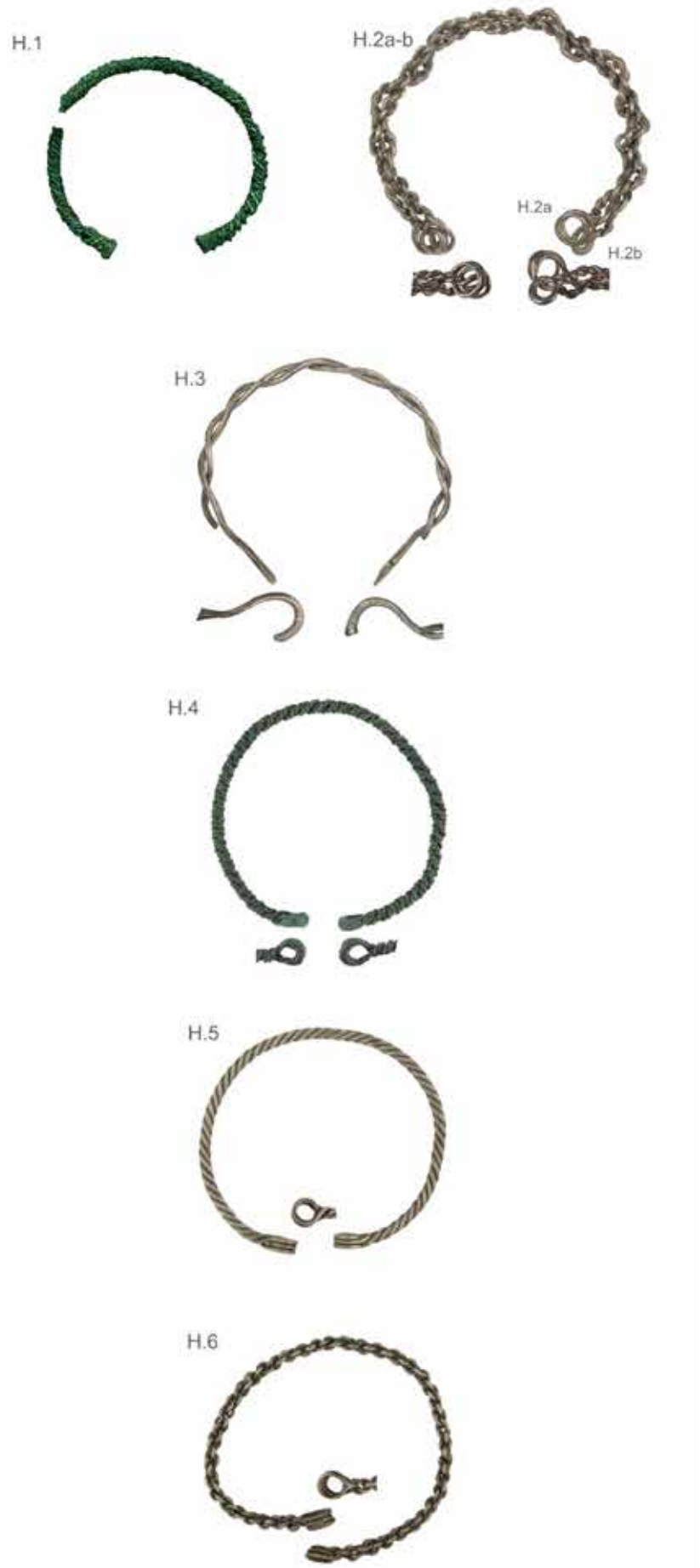


Figure 12.24 The order of deposition of torcs in the upper pit of Hoard H. The torcs at the bottom of the diagram were deposited first. Torcs displayed at the same level were deposited together

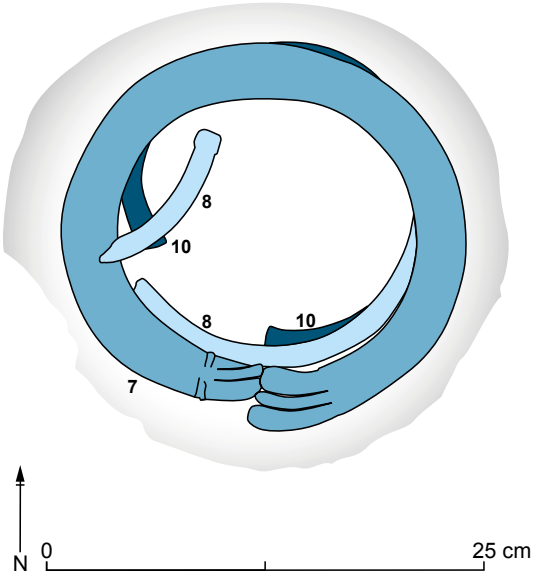


Figure 12.25 Hoard H lower pit torc overlay drawing, showing torcs H.7, H.8 and H.10

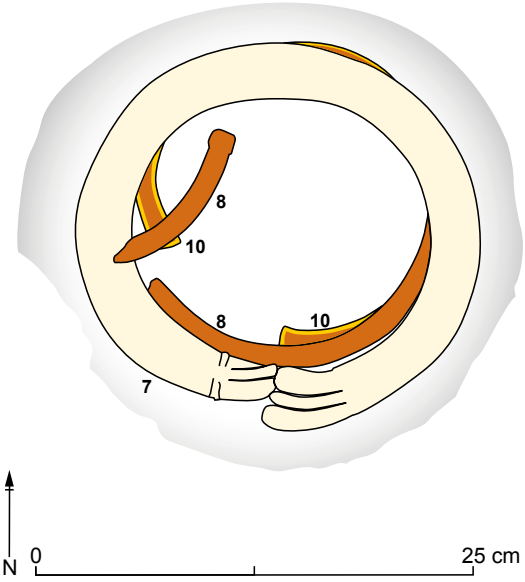


Figure 12.26 Hoard H lower pit torc overlay drawing, showing torcs H.7, H.8 and H.10, colour-coded according to surface metal content (for key see Fig. 23.5)

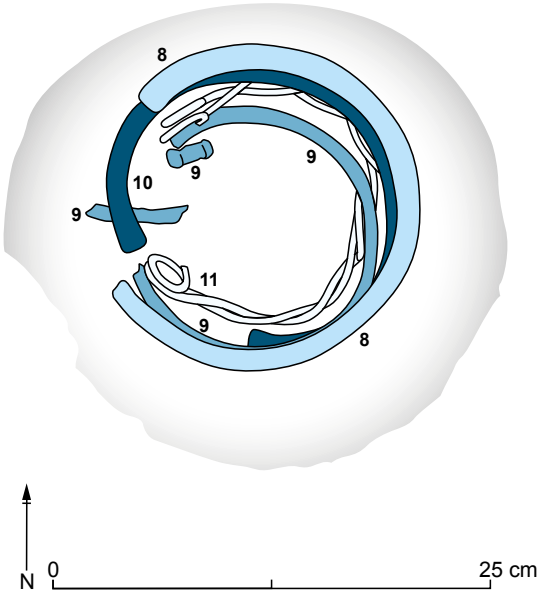


Figure 12.27 Hoard H lower pit torc overlay drawing, showing torcs H.8–H.11

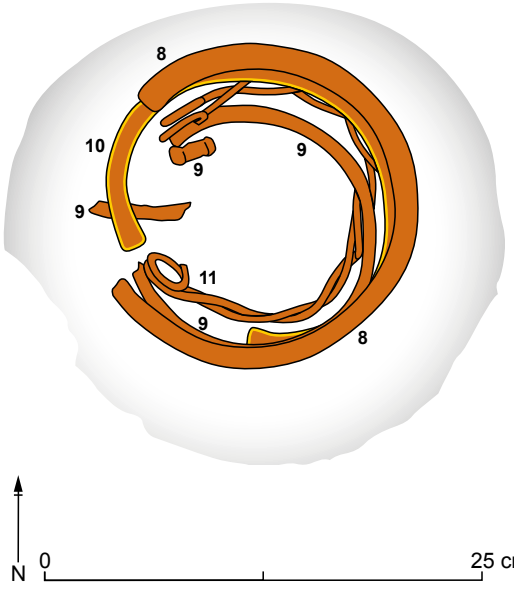


Figure 12.28 Hoard H lower pit torc overlay drawing, showing torcs H.8–H.11, colour-coded according to surface metal content (for key see Fig. 23.5)

Figure 12.29 Photograph of the top of the lower pit of Hoard H, showing torcs H.7–H.8 *in situ*

Figure 12.30 Photograph of the bottom of the lower pit of Hoard H, showing torcs H.8–H.11 *in situ*

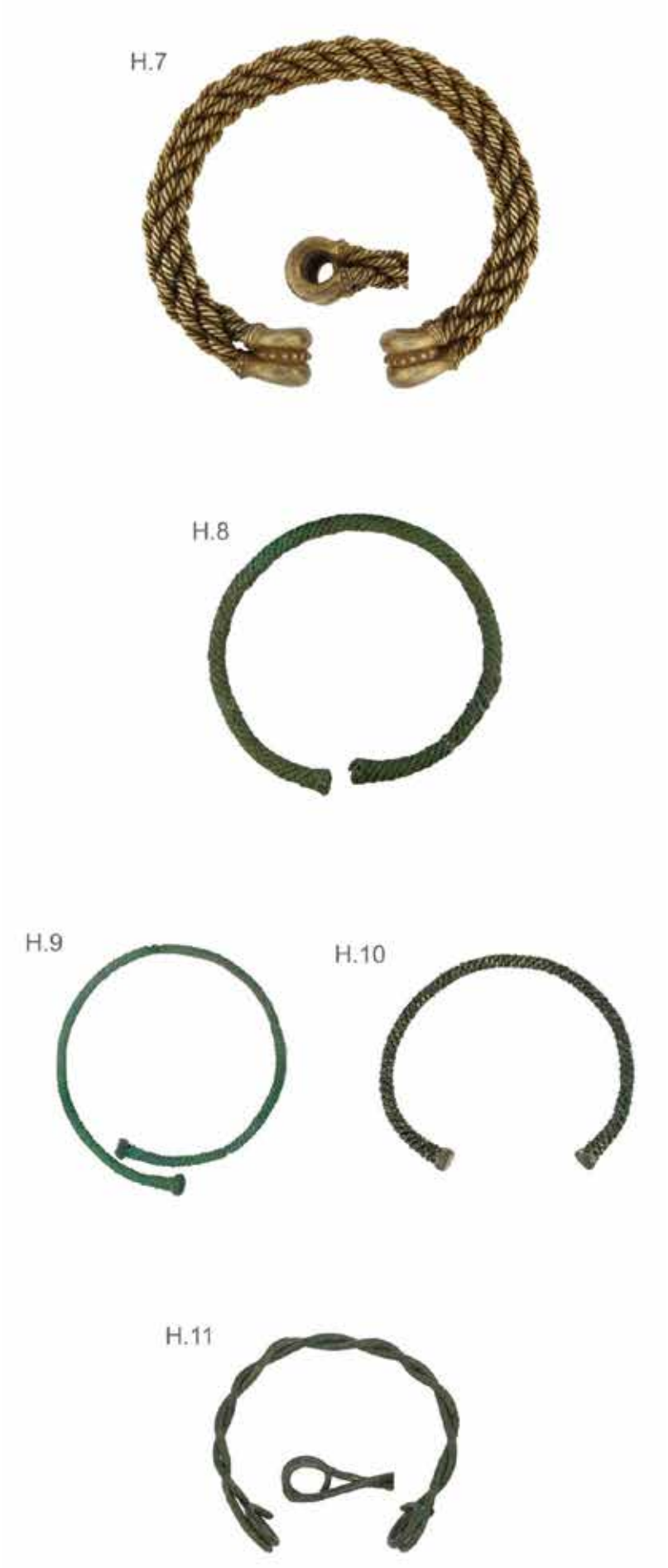


Figure 12.31 The order of deposition of torcs in the lower pit of Hoard H. The torcs at the bottom of the diagram were deposited first. Torcs displayed at the same level were deposited together

Hoard J

Hoard J was discovered by Hodder with his metal detector on 25 November 1990, and subsequently investigated by the excavation team. The hoard was in a very shallow pit, 0.22 by 0.24m, seemingly cut no larger than the torcs themselves (thus only the torcs were drawn, and the pit was not separately planned). Only one layer of torcs was apparent, though the hoard had been heavily disturbed and truncated at the top after being struck by agricultural machinery.

Torcs J.1–J.4 (two gold/silver alloy and two copper alloy) were very fragmented and had been scattered in a line to the north. The assignment of fragments to particular objects was not completed until after the conservation and cataloguing process. The torcs below J.1–J.4 were largely undisturbed (**Figs 12.32–6**). Gold/silver alloy torcs J.7 and then J.6 had been laid into the ground first, followed by composite group J.5a–c. This group comprised two gold/silver alloy torcs, each broken in half when buried, with a length of copper alloy torc threaded through their remaining terminals. The copper alloy torc J.5a had been bent before deposition and was probably not complete at the time of burial. **Figure 12.37** shows the order of deposition.

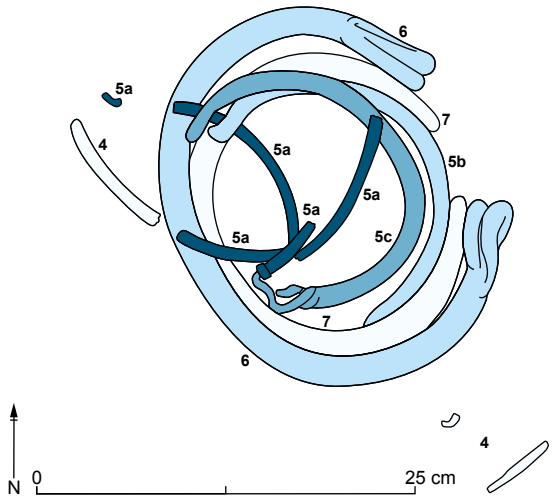


Figure 12.32 Hoard J torc overlay drawing (upper layers disturbed by north–south ploughing)

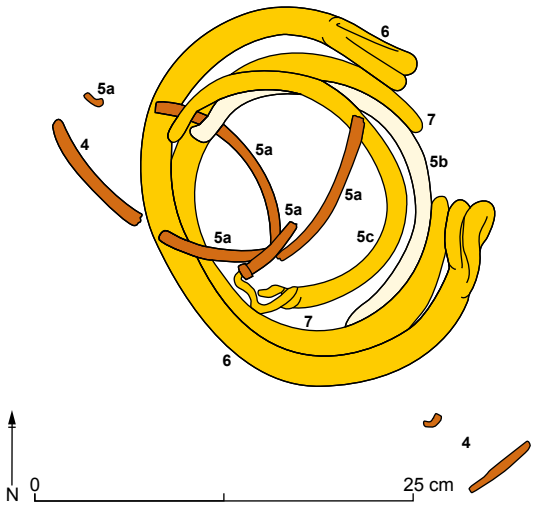


Figure 12.33 Hoard J torc overlay drawing, colour-coded according to surface metal content (for key see Fig. 23.5)

Figure 12.34 Photograph of Hoard J *in situ*, showing composite torc fragment group J.5a–c overlying complete torcs J.6 (uppermost) and J.7 (beneath)

Figure 12.35 *In situ* detailed photograph showing the insertion of torc J.5a through the terminals of torcs J.5b and J.5c

Figure 12.36 *In situ* photograph of torc fragment J.5b overlying torc J.7

Figure 12.37 The order of deposition of torcs in Hoard J. The torcs at the bottom of the diagram were deposited first. Torcs displayed at the same level were deposited together, or their order of deposition cannot be discerned

Hoard K

Hoard K was found by Tony Pacitto with his metal detector on 1 December 1990. The first visible signs were the remains of four copper alloy torcs that had been hit by the plough and scattered along a 1.25m line running north–south across the hoard pit (**Figs 12.39–40, 12.41b**). These copper alloy torcs, K.1–K.4, were planned and recovered, allowing investigation of the pit. The pit survived to a depth of 0.13m in the carrstone bedrock, and was 0.21–0.24m in diameter at its surface (**Fig. 12.38**). Three complete gold/silver alloy torcs, K.5–K.7, were found *in situ* at the base of the pit (**Fig. 12.41a**). K.7 had been deposited first, with K.6 placed on top, followed by K.5 (**Fig. 12.42**).

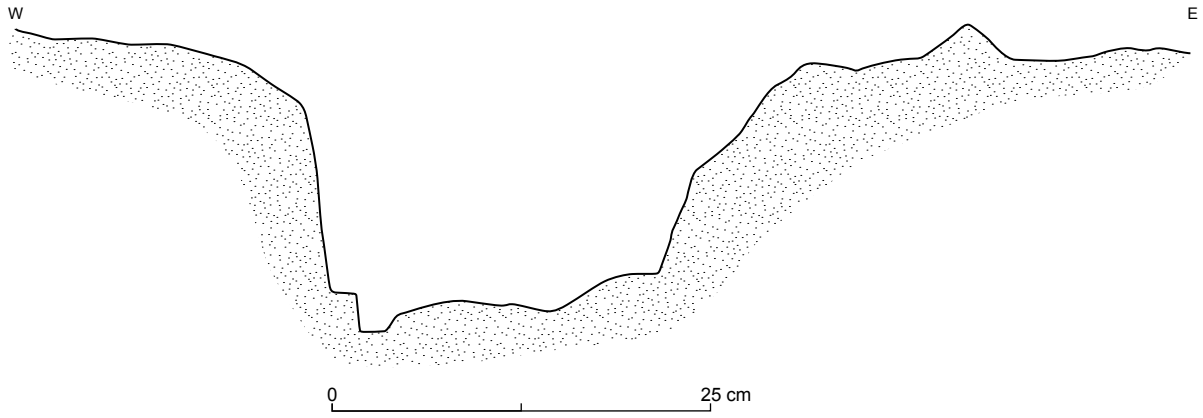


Figure 12.38 Section through Hoard K pit, after complete excavation and removal of artefacts

Figure 12.39 Photograph of the lower part of Hoard K, showing torcs K.5, K.6 and K.7 *in situ*

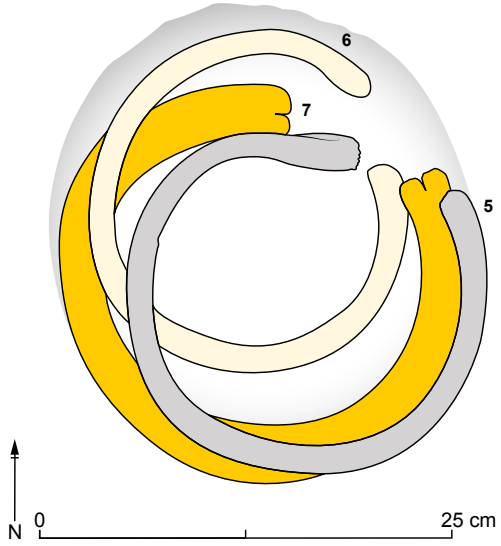


Figure 12.40 Hoard K torc overlay drawing, colour-coded according to surface metal content (for key see Fig. 23.5)

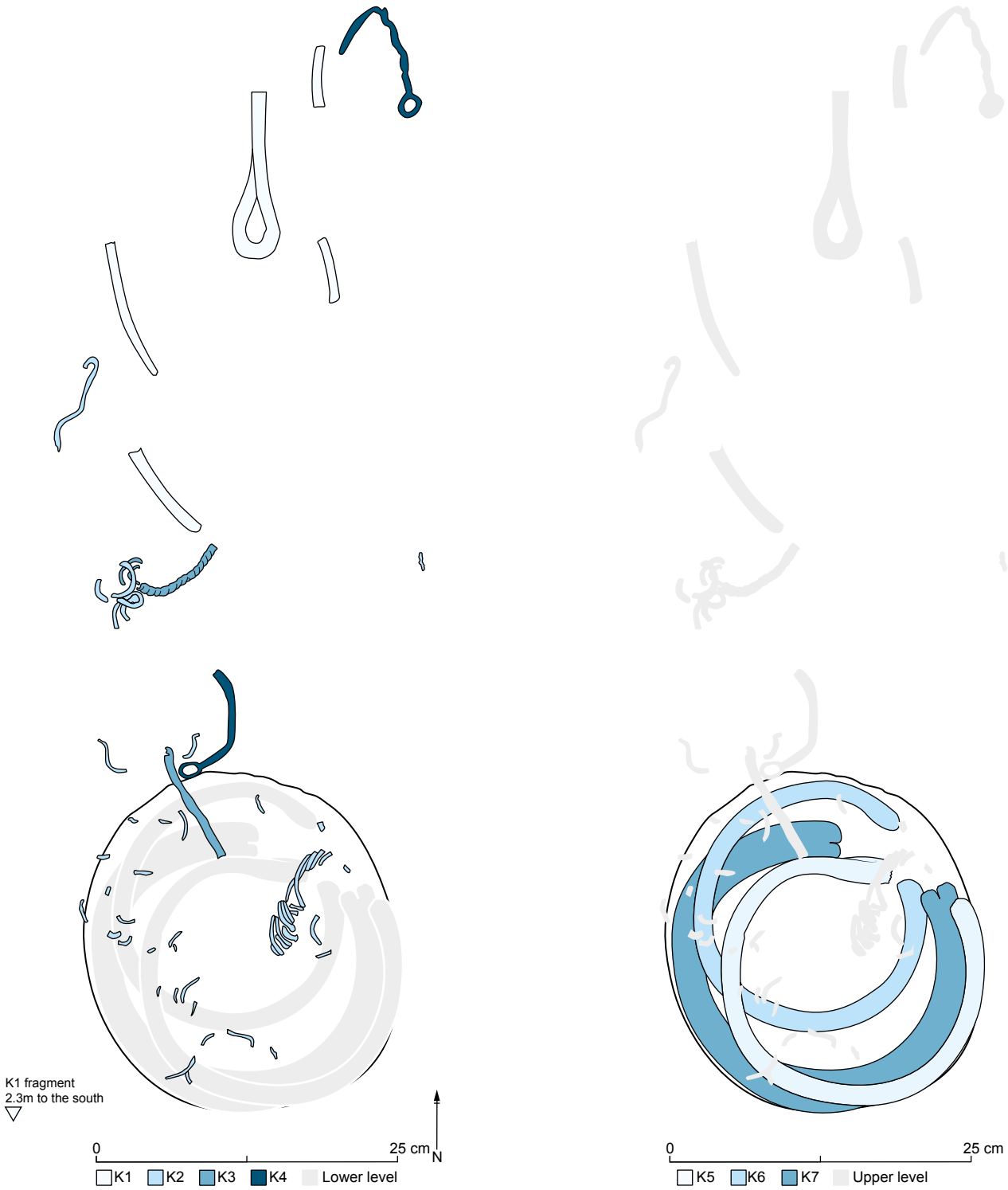


Figure 12.41a–b Hoard K torc overlay drawings showing torcs K.1–K.4 which were scattered by ploughing (a, left) and K.5–K.7 which were found undisturbed *in situ* at the base of the pit (b, right)

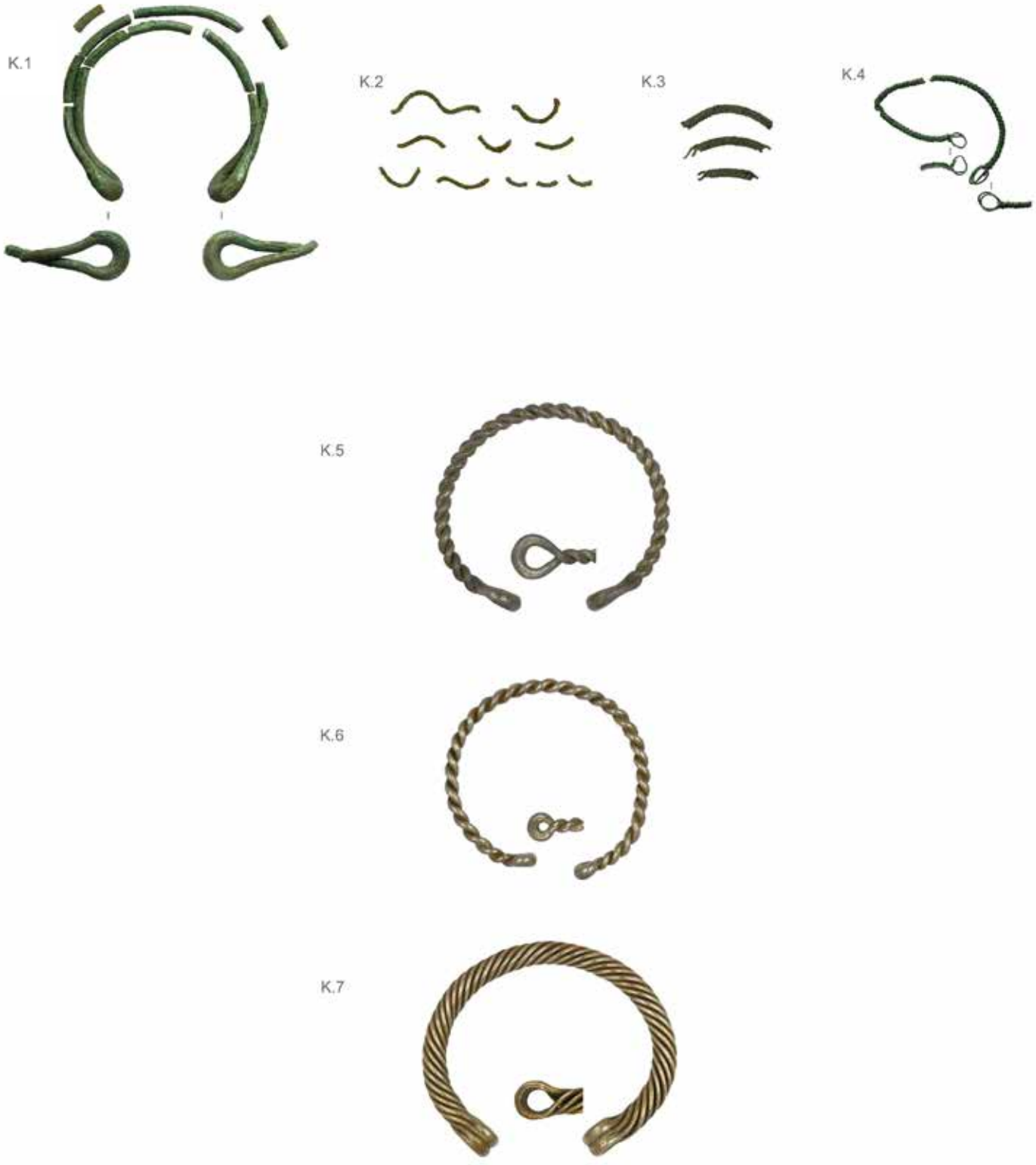


Figure 12.42 The order of deposition of torcs in Hoard K. The torcs at the bottom of the diagram were deposited first. The upper layer was disturbed by ploughing and the order of deposition of K.1–K.4 cannot be discerned

Hoard L

Hoard L, the best preserved of the hoards, was found by Pacitto with his metal detector on 6 December 1990. Initially it appeared to resemble the others excavated in 1990, an undisturbed 'nest' of seven torcs (L.1–L.7) buried in a small pit about 0.1m below the level of the carrstone. The torcs were most likely placed in the ground in sequence (L.7, L.6, L.5, L.4, L.3, L.2, and finally L.1, **Figs 12.45–7**, **23.7**). Once these seven torcs had been removed, the metal detector continued to give a strong signal at the base of the pit. The base was further explored, revealing that L.1–L.7 were in the upper filling of a much larger pit, 0.35–0.45m across at the top, narrowing to 0.27–0.36m at the bottom, cut 0.33m deep below the level of the carrstone (**Figs 12.43–4**). Around 0.16–0.18m below L.7 was another group of 14 torcs, L.8–L.21, deposited in sequence from L.21, ending with L.8 (**Figs 12.48–50**, **23.6**). Stead recorded in the excavation notes that it was unclear whether the upper torcs were in the filling of the main pit, contemporary with the lower torcs (separated by a layer of soil, comparable to that seen in Hoards G and H), or had been subsequently inserted in a small pit cut into the filling of the main pit. The site plans and sections clearly show two

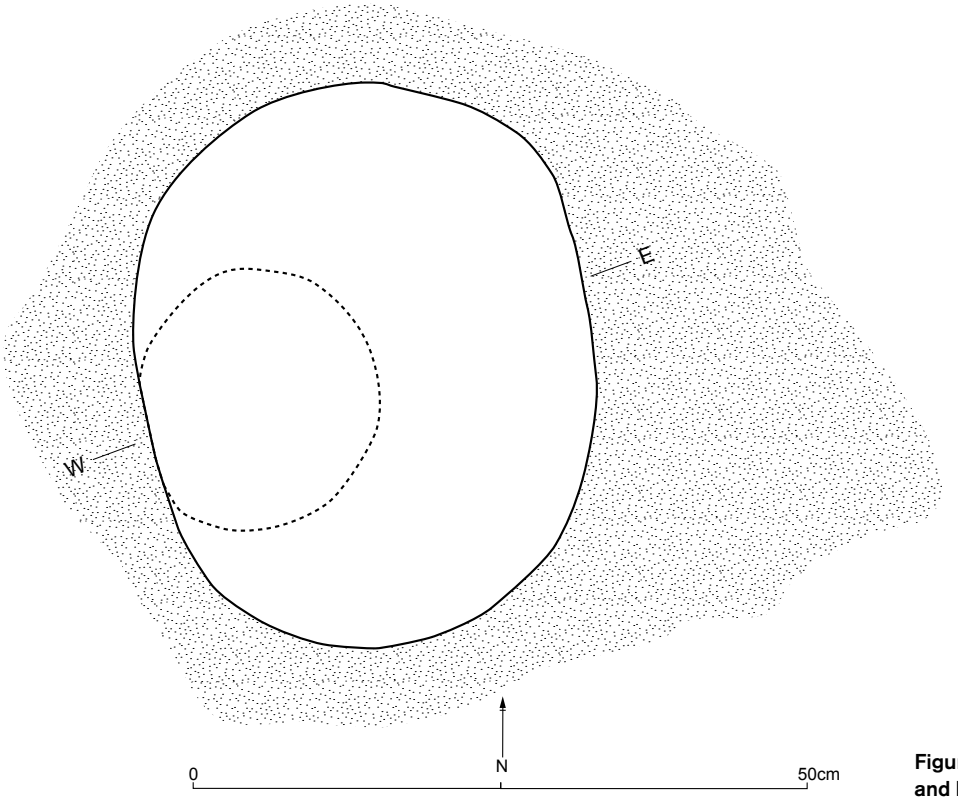


Figure 12.43 Plan of Hoard L pits (A: upper, and B: lower)

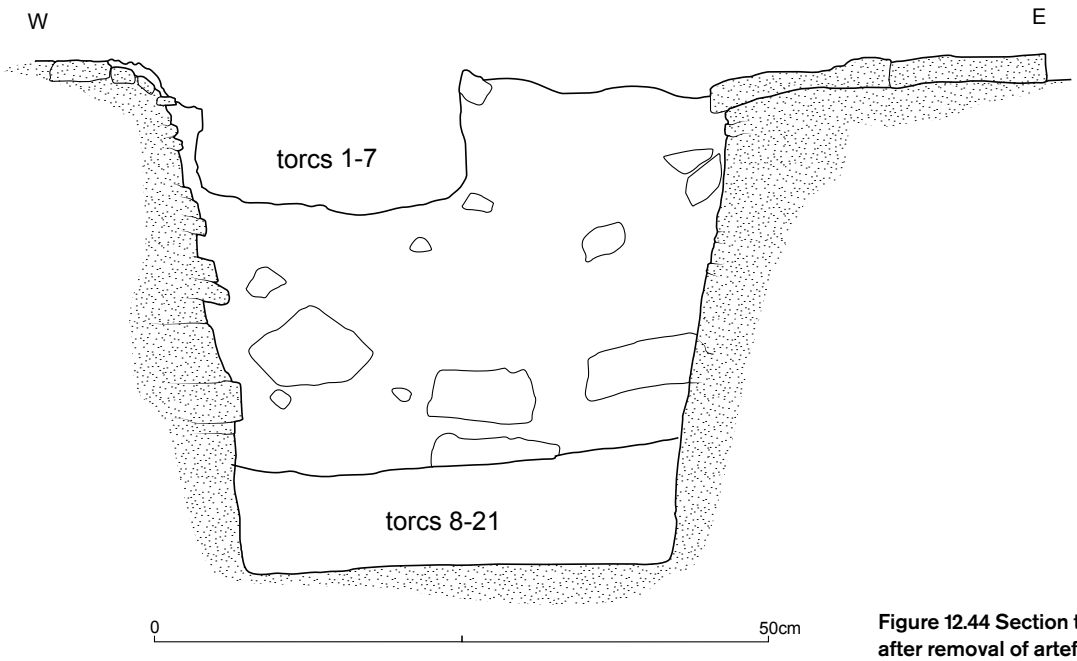


Figure 12.44 Section through Hoard L pit(s), after removal of artefacts

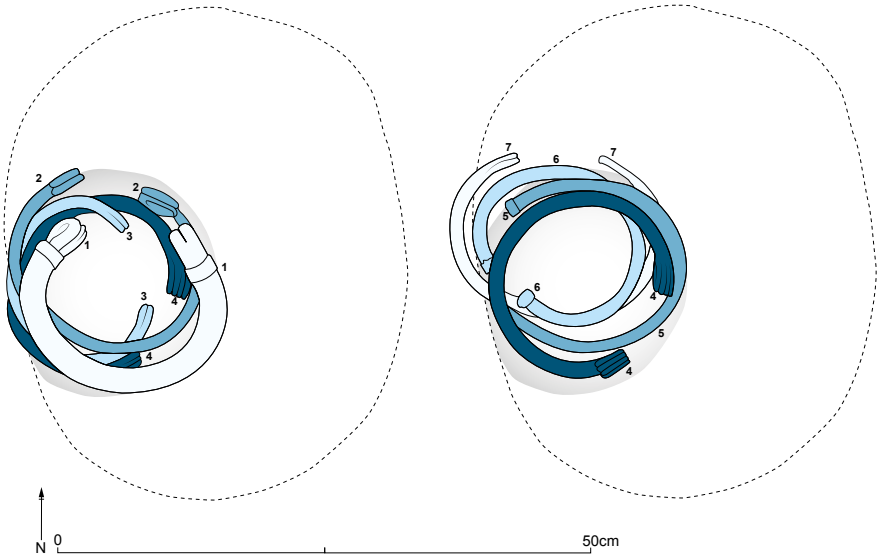


Figure 12.45 Hoard L upper pit torc overlay drawings, showing torcs L.1–L.7

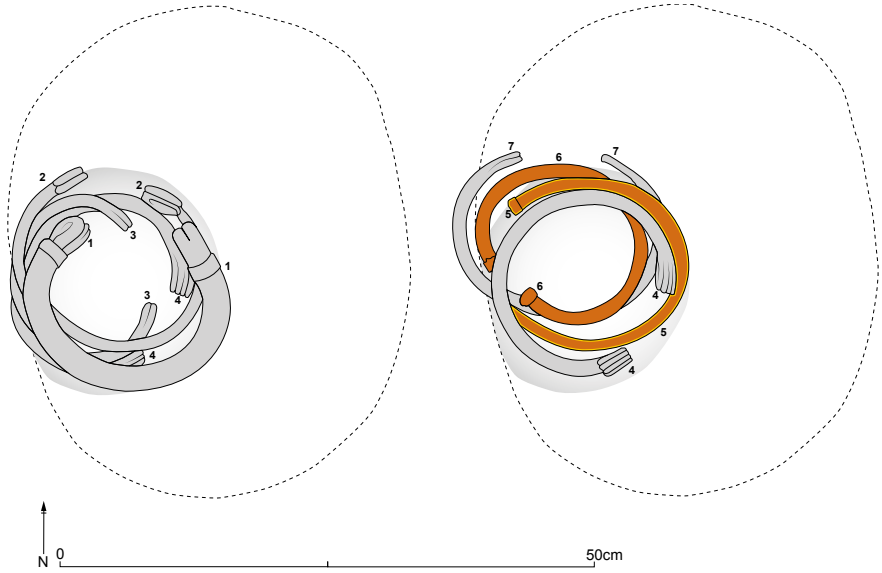


Figure 12.46 Hoard L upper pit torc overlay drawings, showing torcs L.1–L.7, colour-coded according to surface metal content (for key see Fig. 23.5)

Figure 12.47 The order of deposition of torcs in the upper pit of Hoard L. The torcs at the bottom of the diagram were deposited first

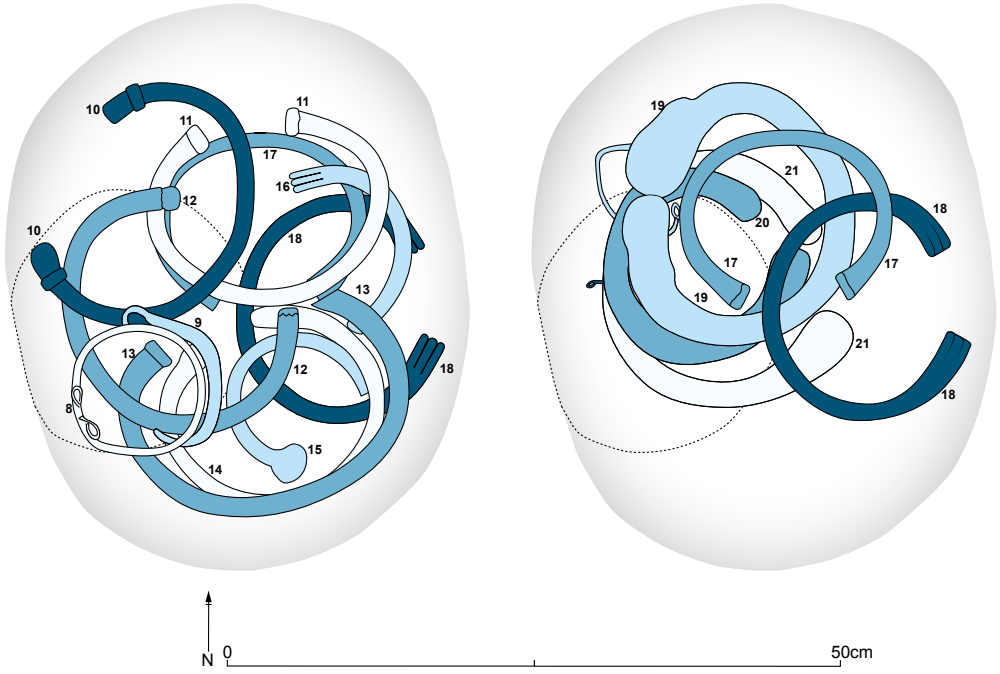


Figure 12.48 Hoard L lower pit torc overlay drawings, showing torcs L.8–L.21

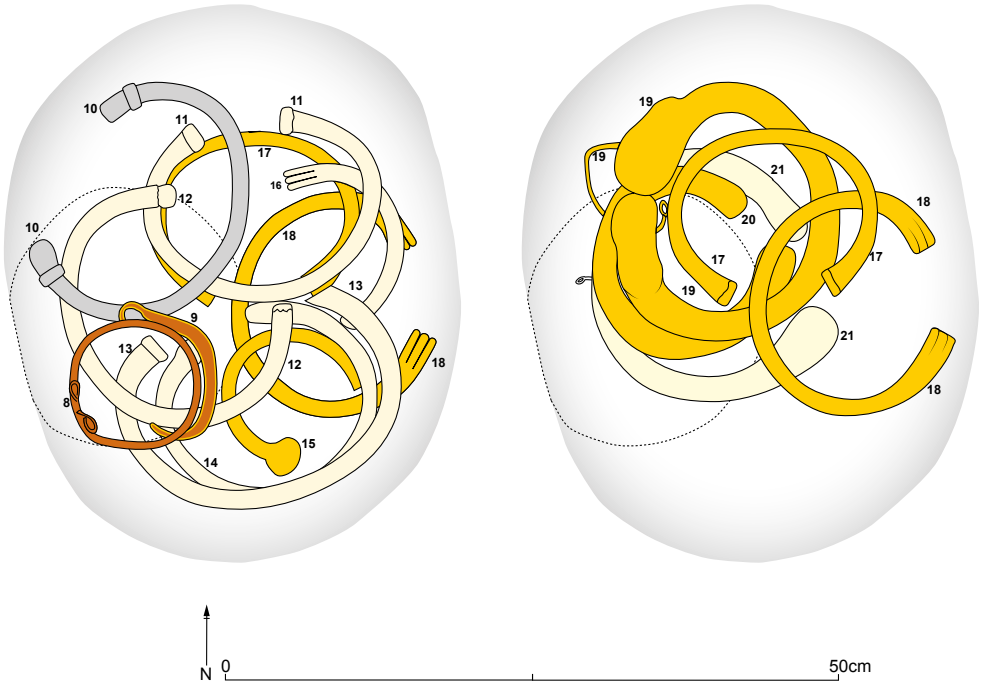


Figure 12.49 Hoard L lower pit torc overlay drawings, showing torcs L.8–L.21, colour-coded according to surface metal content (for key see Fig. 23.5)

separate cuts, with the smaller respecting the edge of the larger, and therefore it seems most likely that a second pit was dug into the first. This could have been either more or less immediately after the initial deposit had been made, or sometime later. Nonetheless, the two deposits seem to reference one another in a number of ways (see Chs 20 and 23–4), and must certainly have been closely related.

Radiocarbon dating of part of an organic repair from torc L.6 gave a date of 360–110 cal BC (at 95% confidence; see Ch. 19 and **Table 5.2**).

Figure 12.50 The order of deposition of torcs in the lower pit of Hoard L. The torcs on the right were deposited first, from bottom to top, followed by the torcs in the left column, from bottom to top

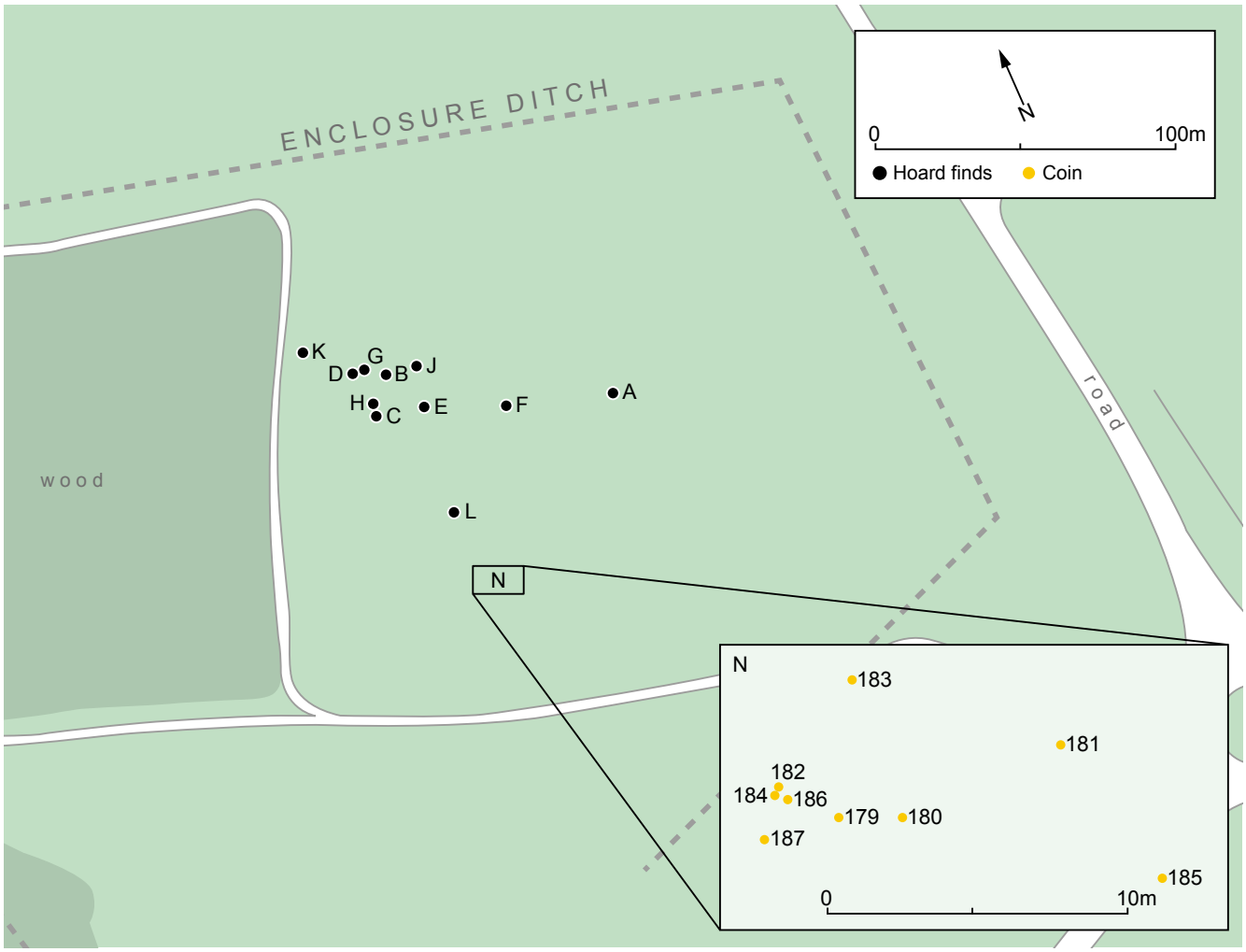


Figure 12.51 Distribution of coin scatter forming Hoard N (labelled with their coin catalogue numbers)

Hoard N

Hoard N was a scatter of metal-detected Gallo-Belgic A and C gold coins, assumed to be a dispersed hoard (**Fig. 12.51**). Four of them (Cat. nos 182, 184, 186 and 187), found on 12 November 1991, were virtually together but there was no hint of a pit. Two others had been found the previous day, 1.5m (Cat. no. 179) and 3.5m (Cat. no. 180) away from that spot. Three more, found 5m (Cat. no. 183), 9m (Cat. no. 181) and 12m (Cat. no. 185) away, were almost certainly from the same hoard (two of them were found the same two days but the third, Cat. no. 183, was found in 1990).

The hoard comprised:

- Five Gallo-Belgic A staters (Cat. nos 179–183)
- One Gallo-Belgic A quarter stater (Cat. no. 184)
- Two Gallo-Belgic C staters (Cat. nos 185–6)
- One worn Gallo-Belgic C quarter stater (Cat. no. 187).

All are Gallo-Belgic A or C types, most likely minted in the period 100–60 BC (see Ch. 15).

Early Roman (Phase 4) hoards

Hoard P

Hoard P, a large hoard of Iron Age coins buried in a silver bowl (hence often known as the 'Bowl Hoard'), was removed from the site illegally by illicit detectorists sometime between the 1990 and 1991 excavation seasons. Stead (Ch. 2) suggests that it was located under the spoil heap of the 1990 excavations, in the north-west corner of the hoard field. Fragments from a silver vessel (P.1–P.7) were recovered from this area in 1991 when it was stripped in advance of archaeological excavation, most likely the last remnants of the hoard.

According to Chadburn (2006, hoard 41, 'Hunstanton I'), the lowest part of the deposit consisted of 90 or more gold coins and three 'saucer-shaped ingots' (one gold alloy, one silver alloy, and one predominantly of copper). Above this base deposit was the silver bowl containing *c.* 6,000 coins, and above that were found three brooches and a torc fragment.

Reconstruction of the coin assemblage from Celtic Coin Index records and contemporary sales catalogues (Ch. 15, Chadburn 2006; de Jersey 2014, no. 196.6; Talbot 2017, 223–4) suggests that Hoard P was most likely deposited in the mid-1st century AD, perhaps around the early AD 60s. It consisted primarily of local East Anglian silver coinage.

Hoard M

The other Phase 4 assemblage, Hoard M, was found by Charles Hodder with his metal detector in March 1991, in the north-east corner of the wood. It consisted of six amorphous lumps of metal (five of silver/copper alloy, M.1–M.5, and one small piece of copper alloy, M.6) that had been heated in a furnace to a high temperature – but not sufficiently high to have made them fully liquid. M.1–M.5 were alloys of about 75% silver and 25% copper (suggesting

that they were recycled artefacts rather than silver processed from ore) and weighed a total of 6.65kg; the largest lump alone (M.1) was 4.5kg.

The ingots or lumps were found within 2m of one another, one partly exposed on the ground and the others very close to the surface, at the foot of a tree in the corner of the wood. Subsequent excavation of the findspot revealed no features or additional finds. It is possible that they had been found in the field some time previously and re-deposited next to the tree.

Embedded charcoal lumps were radiocarbon dated (see **Table 5.2**; Garrow *et al.* 2009), providing a calibrated radiocarbon date of 20–210 cal AD at 95% confidence, and 30–130 cal AD at 68% confidence. The charcoal consisted of old alder wood, and so the age of the wood must also be taken into account when considering this date.

Chapter 13
Iron Age Metalwork Typology

Julia Farley and Jody Joy

This chapter provides an overview of the basic terminology and typology employed in relation to the Iron Age metalwork in this volume, particularly torcs, bracelets and rings. It is based in part on initial typological work carried out by Ian Stead (1991a). This typology forms the basis for the catalogue of the torc hoards and stray finds presented in the following chapter. The forms and functions of these objects are discussed in more detail in Chapter 22 and their decoration in Chapter 21.

Terminology

TORC – Penannular or annular personal ornament, large enough to be worn at the neck (i.e. an internal circumference of over *c.* 280mm). Formed of a wire or sheet-metal neck-ring, usually with prominent terminals.

BRACELET – Penannular or annular personal ornament, formed of wire or sheet metal, of a size most likely to have been worn at the wrist (i.e. an internal circumference of under *c.* 230mm).

TORC/BRACELET – Personal ornament fragment which could have belonged to either a torc or a bracelet.

The division of ornaments into 'torcs' and 'bracelets' is, of course, not entirely clear-cut. It is possible for example that some ornaments were worn higher up the arm, not just at the wrist. However, the size cut-offs used here have been chosen to reflect what appears to be a genuine ancient division between distinct groups of objects: larger ones (here referred to as torcs) above *c.* 280mm internal circumference, and smaller ones (here referred to as bracelets) below *c.* 230mm internal circumference.

Figure 13.1 shows the approximate internal diameters of all the torcs and bracelets from Snettisham which were complete and undistorted enough to allow a reliable measurement to be taken. Only four out of over 60 objects are clearly bracelet-sized, with the fragmentary F.208 and F.209 likely coming in at under 130mm in internal circumference, and the slightly larger B/C.12 and F.121 measuring 213mm and 201mm respectively. There are four other objects which are likely bracelets which do not feature in this graph as their circumferences are not easily measured. Tubular bracelet E.1c is not included in the figure due to its distorted shape, but would likely measure in at around 230mm, with this slightly larger opening probably reflecting the fact that its annular form does not allow it to be opened up to be taken on and off. B.8 and F.7f have been heavily distorted, and B.12–13 is too fragmentary to be certain of its original form, but from the fine nature of the wires a bracelet seems the most likely identification.

There is no object from Snettisham with an internal diameter between 230mm and 280mm. There are only three torcs between 230 and 330mm in internal circumference (B/C.47–8, G.14, F.116) all with internal diameters of just over 280mm (**Fig. 13.1**). These could potentially have been worn on a very slender neck or around the arm. They are referred to in the catalogue as 'small torcs'. All other complete or near-complete torcs have internal circumferences of over 330mm and are highly likely to be neck ornaments. However, as with the bracelets, for the torcs of a smaller size we cannot rule out the possibility that they were worn around the upper arm (see Ch. 22 for a full discussion of torc diameters).

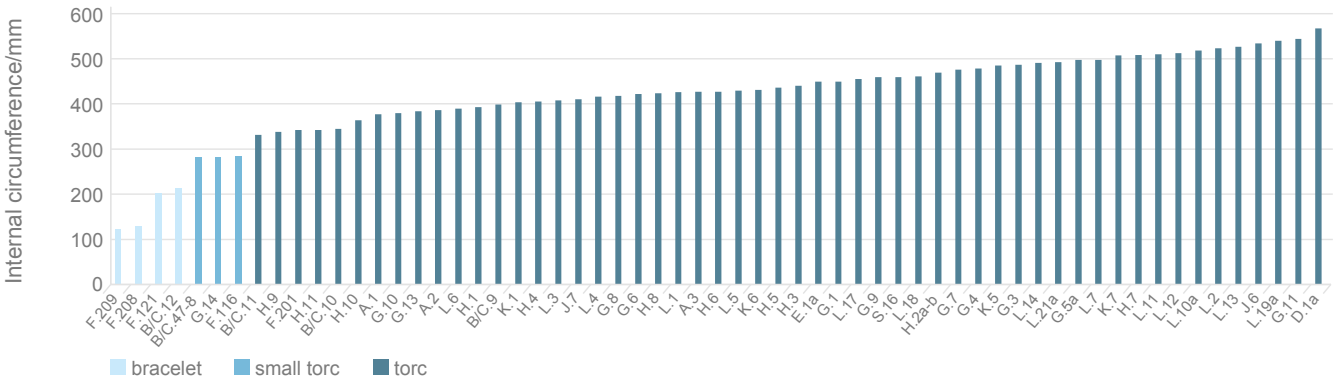

Internal circumference/mm
600
500
400
300
200
100
0
F.209 F.208 F.121 B/C.12 B/C.47-8 G.14 F.116 B/C.11 H.9 F.201 H.11 B/C.10 H.10 A.1 G.10 G.13 A.2 L.6 H.1 B/C.9 K.1 H.4 L.3 J.7 L.4 G.8 G.6 H.8 L.1 A.3 H.6 L.5 K.6 H.5 H.3 E.1a G.1 L.17 G.9 S.16 L.18 H.2a-b G.7 G.4 K.5 G.3 L.14 L.21a G.5a L.7 K.7 H.7 L.11 L.12 L.10a L.2 L.13 J.6 L.19a G.11 D.1a
bracelet
small torc
torc

Figure 13.1 The internal diameters of the 61 most complete torcs and bracelets from Snettisham, ordered by size. Each bar represents one object; the height of the bar shows the diameter

NECK-RING – The main body of a torc, excluding terminals. Formed of wires or sheet metal.

BODY – The main circumference of a bracelet, excluding the terminals. Formed of wires or sheet metal.

TERMINAL – When complete, a penannular torc or bracelet has two terminals (see **Fig. 13.3** for detailed terminal typology). In some cases, these are formed from the wires or sheet metal which make up the neck-ring. On other torcs the terminals are separate components (of cast or sheet metal) which were cast or soldered onto the neck-rings. In such cases, the term *COLLAR* is used to describe the part of the terminal which accommodates the wires of the neck-ring (see **Fig. 13.5**). The construction of these separate terminals can be very complicated, comprising many different components (see Ch. 17).

WIRE – a single strand of metal which may be circular, faceted or (more rarely) square in cross-section. The basic building block of the neck-rings/bodies of multi-strand wire torcs and bracelets (see below). The term 'wire' is used for strands of metal 0.6–6.5mm in diameter.

ROD – a thick single strand of metal, similar in form to the definition for wire (above), but over 6.5mm in diameter.

Whilst the division between 'wire' and 'rod' is somewhat arbitrary, it is used because there does appear to be a qualitative difference between the fine-wire and more robust torcs. The frequencies of the various wire/rod diameters are shown in **Figure 13.2**. The most frequent wire diameters are 1.1–2.0mm, accounting for over 50% of objects and fragments. Above 6.5mm, the term rod is used. In practice, this refers to a small group of objects and fragments with rod diameters of 7.1–10.5mm. By number of catalogue entries, the most frequent rod diameters are 8.6–9.0mm. In part this reflects the fact that at least two torcs made from rod of this diameter have been cut into sections: see Cat. nos S.31–9 and S.41–4.

TWISTED WIRE – a single strand of wire (usually square in cross-section) which has been tightly twisted on itself to give a crimped appearance. Such twisting can be either right-slanting (Z-twist) or left-slanting (S-twist) (see below).

ROPE – multiple wires plied or coiled together. A torc neck-ring or bracelet body can be composed of a single rope, or a number of ropes which are themselves plied or coiled around one another, to form a *CABLE*. (See discussion of Stages in the neck-ring terminology section, below.)

RIBBON – a narrow strip or band of metal with flat cross-section.

Torc typology

The following typology is quite loose, based on the variety of different terminals and neck-ring/body constructions.

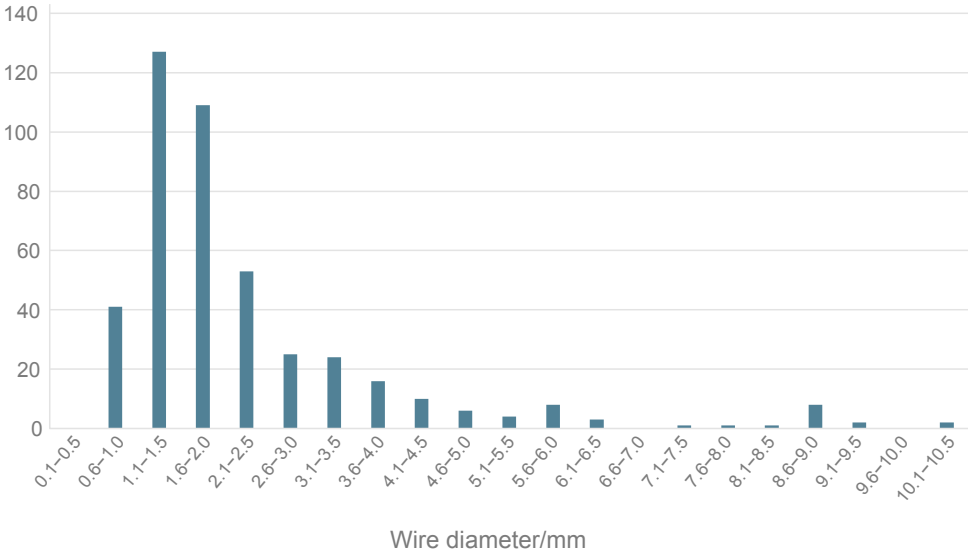


Figure 13.2 The frequency of wire diameters among all the multi-strand torcs and fragments from Snettisham with a reasonably identifiable neck-ring construction (n=441)

Figure 13.3 The main torc terminal types (images not to scale)

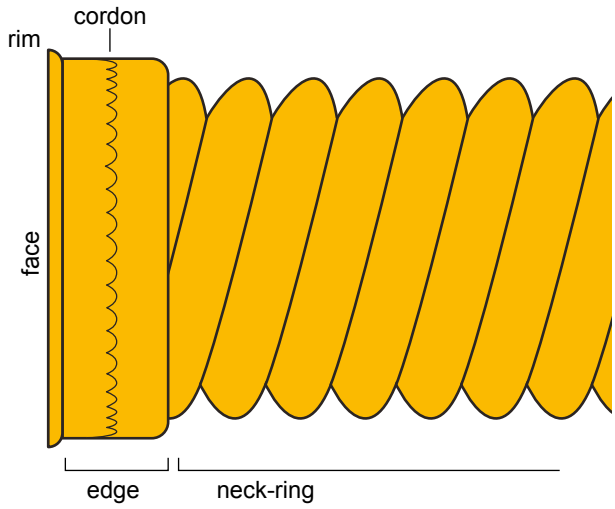
Whilst there are preferential pairings of neck-ring and terminal types (see below) the variety of combinations is such that a typology combining terminals and neck-rings would be unnecessarily complicated and cumbersome. Consequently, terminals and neck-rings are defined separately, meaning that terminal type and neck-ring type can be combined in multiple ways.

Neck-rings

TUBULAR – made of sheet metal formed into a tube, creating hollow, tubular neck-rings. Some tubular torcs have an iron core. Others may have been filled with an organic substance such as wax. Tubular torc types are further subdivided below.

MULTI-STRAND – the neck-rings/bodies of the majority of torcs and bracelets are comprised of multiple wires. The language and notation employed to discuss the arrangements of these wires (see below) has been adapted from that used to describe the structure of spun yarns in ancient textiles, including the Stage method developed by Dixon (1957) and the use of parenthetical notation outlined by Splitstoser (2012).

Figure 13.4 The terminology used to refer to parts of buffer terminals



Terminals

Seven or eight principal types of torc and bracelet terminal can be identified (**Fig. 13.3**). Whilst there is huge variety in form, certain neck-ring/body constructions are more likely to be paired with specific terminal types. For example, tubular torcs and Stage 2 coiled torcs (see below) generally have buffer terminals.

BUFFER TERMINAL – Flat, circular terminals (see **Fig. 13.4** for terminology). Range from a very simple, plain facing, cast onto the end of the neck-ring, to something more ornate. The flat, circular face of the terminal can be decorated with inscribed or raised ornament, as can the edges. Terminals vary in thickness.

LOOP TERMINAL – Terminal formed of a SINGLE LOOP or MULTIPLE LOOPS. The loops are formed using the wires or ropes of the neck-ring, and are usually more or less circular in shape. Loop terminals range in size and thickness depending on the diameter of the wires/ropes of the neck-ring. The majority are annular, although some are penannular. In the latter case, where the loop is significantly incomplete, the terminal is referred to as a *HOOK TERMINAL*. This is very unusual, and may indicate a damaged or unfinished terminal (see e.g. H.3). Loop terminals are often continuous with the neck-ring wires so that a multi-strand torc can effectively be made from a single length of wire, bent back on itself at one terminal, with the ends of the wire meeting at the other. Manufacturing marks sometimes reveal soldered or hammered joins at the terminals to disguise the ends of the wire. The details of the loop terminal construction are described on a case-by-case basis in the catalogue.

RING TERMINAL – Similar to a loop terminal, but where the loop(s) has/have been thickened by hammering or the casting-on of additional metal. Generally this means that none of the ends of the neck-ring wires are visible. The central eye of the ring ranges from near-circular to teardrop-shaped. Decoration is sometimes applied by punching. If a ring terminal is made from a multiple-loop terminal, the joins between the loops may be soldered and decorated.

REEL TERMINAL – Cast terminals in the shape of a simple fly-fishing or cotton reel. The terminal attaches onto

the neck-ring via a collar resembling a buffer terminal. This is unusual, with only one example recorded (F.119–F.120).

TORUS TERMINAL – Hollow, doughnut-shaped terminal, see **Figure 13.5** for terms used to refer to different elements of the terminals. Very often decorated with raised and inscribed ornament. Often attached to the neck-ring/body wires via a collar, as for reel terminals, above. These collars are often also decorated.

CAGE TERMINAL – Terminal formed from one or more wires (often extensions of the neck-ring wires), which are looped back on themselves to form a hollow, often more or less spherical, wire 'cage'. Additional decoration, such as soldered pellets, is sometimes added.

Of the multi-strand torcs and fragments from Snettisham, 184 objects had an identifiable terminal type. The proportions of each type are summarised in **Figure 13.6**. Torus and reel types have been grouped, as reel terminals are represented by only one torc. Likewise, only torc H.3 has two clear hook terminals, and so this has been grouped with loop terminals. Of terminals generally made from the neck-ring wires themselves with small additions (loop/hook, ring and cage), loop terminals are by far the most common, with cage the most unusual. In terms of the types where terminals are made as separate components, buffer terminals are more common than torus. Torus terminals are also generally the most complex in terms of construction.

Tubular torc types

Tubular torcs are here divided into six types (**Fig. 13.7**). Type 1 have small, hollow buffer terminals (35–38mm in diameter) with no clasp, and narrow neck-rings (<10mm in cross-section). These are similar to Hautenauve's (2005) Type IIIa 'torque pénannulaire à corps massif et tampons sans fermoir', but with hollow (rather than solid) neck-rings. Hautenauve (2005, 99) classes them as a special group of 'filiforme' torcs, but here it is preferred to group them with tubular examples, since in all securely identified cases (i.e. where a terminal is present) the neck-rings are hollow. There are five certain examples from Snettisham, all fragments with only one terminal remaining (F.1c, F.1d, F.57, F.58, F.59). Most of the terminals are plain, but F.57 has curvilinear decoration. Other fragments of narrow tubular neck-rings

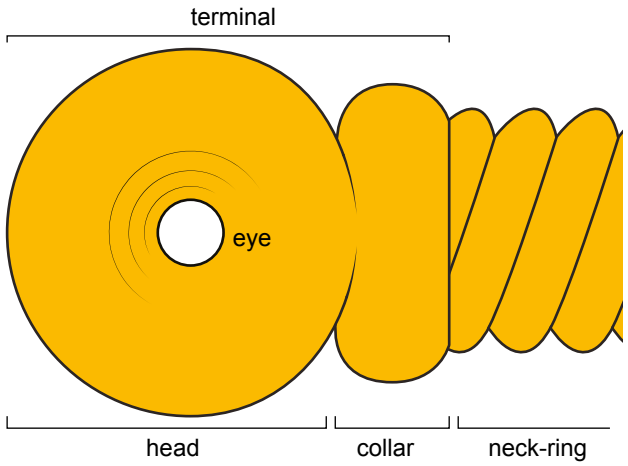


Figure 13.5 The terminology used to refer to parts of torus terminals

(F.2a, F.4f, F.5g, F.31b, F.33, S.14) may be from Type 1 torcs. Most of the neck-rings are undecorated, but fragments F.31b and F.33 have punched or stippled decoration.

Type 2 (of which there is only one example at Snettisham, F.63–6) have small buffer terminals (approx. 30mm in diameter) fastened by a clasp, and a narrow neck-ring (around 10mm in cross-section). The example from Snettisham is in several pieces, and the neck-ring has an iron core. This type is similar to Hautenauve's (2005) Type IIIe 'corps creux, tampons à fermoir', though she classes this particular torc from Snettisham as a unique example of a 'torque tubulaire à double fermoir' (Hautenauve 2005, 98–9).

Type 3 have larger hollow buffer terminals (47–60mm in diameter), often decorated with stippling or other texturing. Several have a smaller bead or collar behind the main terminal, before narrowing into the neck-ring. There are six terminals of this type from Snettisham (F.2g, F.2h, F.35, F.47, F.48, F.60), some with a filler of sand or perhaps an organic material. No terminals of this type have surviving neck-rings, so the form and diameter of the neck-rings are uncertain, although it is possible that neck-ring fragment F.62 is from such a torc.

Type 4 (F.6b, F.30a, F.42, F.45, F.46, F.61, S.13) have hollow neck-rings of medium diameter (12–35mm), expanding towards flat buffer terminals which are simple

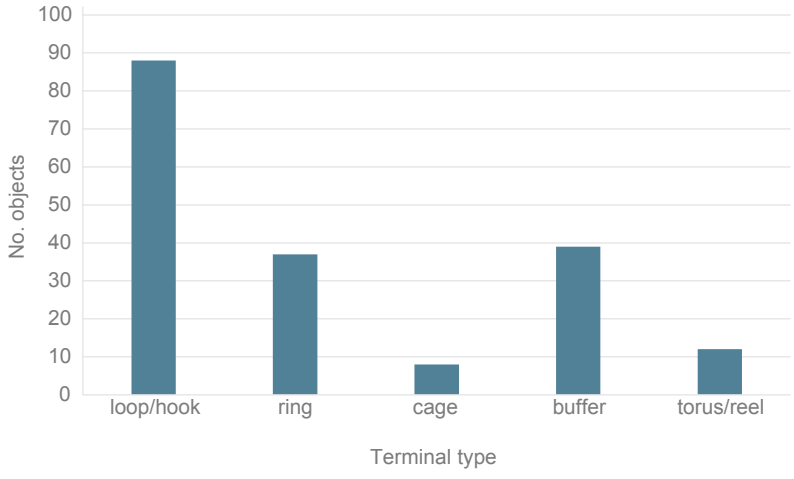


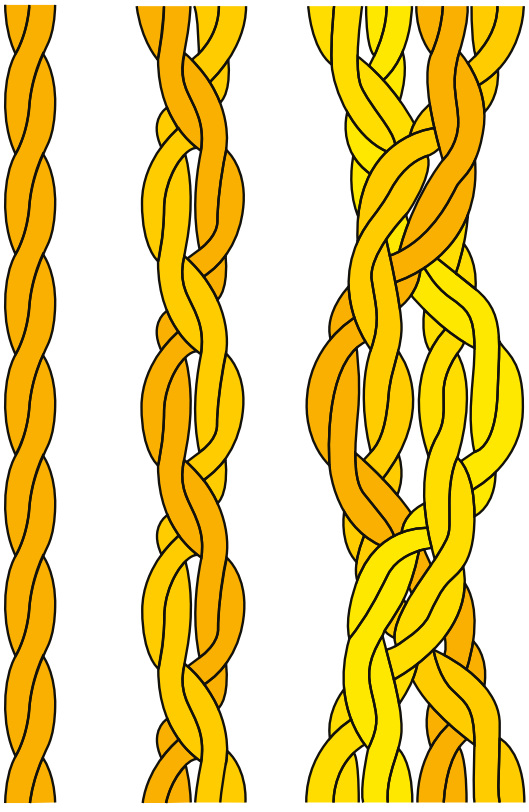
Figure 13.6 The frequency of terminal types among the multi-strand torcs, bracelets and fragments from Snettisham

Figure 13.7 Tubular torc types (images not to scale)

'caps' to the ends of the neck-ring. Hautenauve (2005, 96–8) subdivides this group into 'torques tubulaires cylindriques' and 'torques tubulaires tronconiques' (the latter flaring more noticeably towards the terminals). Many of these torcs have intricate decoration.

Type 5 are hollow tubular torcs with large (*c.* 60mm), expanded buffer terminals, narrowing to a hollow neck-ring.

Figure 13.8 Staged construction of plied and cabled structures in yarn or wire



There are two examples from Snettisham, each comprising a single damaged terminal: F.31a and F.43. These are classed alone together by Hautenauve (2005) as 'torques tubulaires à extrémités en trompette'. Both terminals (which are from different torcs) are decorated with curvilinear designs. In both cases, the end of the terminal does not survive, so it is unclear if these torcs had clasps or fixings at the front.

Type 6 are the massive tubular torcs present in Snettisham Hoard A (A.1, A.2, A.3, A.4–A.7) and as stray find S.12 (of which only the iron core remains), with these finds representing between them a minimum number of five such torcs from the site. These are classed by Hautenauve (2005) as Type V 'torc tubulaire à fermoir dorsal et tampons articulés'.

Multi-strand neck-ring/body construction

An extraordinarily diverse range of multi-strand torc neck-ring and bracelet body constructions are represented at Snettisham. All are created by twisting/plying or coiling wires together (see below). Whilst in some cases this may create a visual effect similar to a plait or braid, there are no cases of actual braided wire neck-rings at Snettisham. In order to accurately codify the sheer variety of constructions present, it was necessary to develop a new terminology based on those used in textile literature for multi-strand yarns.

Dixon (1957, 135) used the Stage system to describe the observable features of complex yarn constructions (**Fig. 13.8**). A 'single-ply' yarn is Stage I, and two or more such yarns spun (plied) directly together constitute a Stage II yarn. Similarly, two or more Stage II yarns spun together create a Stage III yarn, and two or more Stage III elements combine to form a Stage IV yarn.

The same principles of construction can be found in multi-strand torc neck-rings and bracelet bodies. At Snettisham, the vast majority of these artefacts consist of

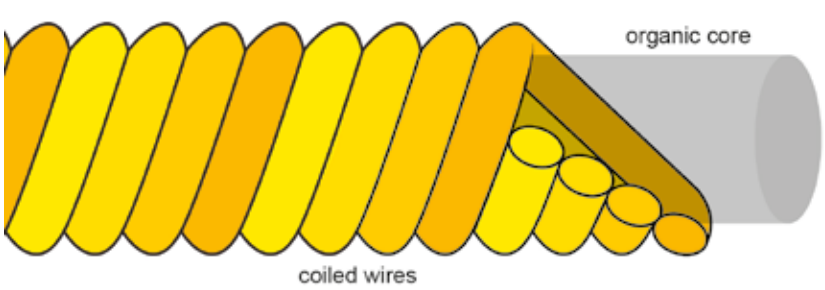


Figure 13.9 (above) Diagram of coiled wire neck-ring or rope construction

Figure 13.10 (right) S- and Z-twist, showing direction of slant in the torc wires

either a Stage II or Stage III structure. For the purposes of the catalogue, Stage I elements are referred to as *WIRES* or *STRANDS*, Stage II elements as *ROPES*, and Stage III and IV elements as *CABLES* (please note that this differs from the terminology employed by Dixon, 1957).

Despite numerous similarities, there are three key differences between the construction of wire torcs and spun yarns. First, in the case of textiles even a 'single-ply' (Stage I) yarn is formed from a bundle of plant or animal fibres which are usually spun either clockwise (Z-twist) or anti-clockwise (S-twist) (**Fig. 13.10**). This can vary even within a single yarn. This is not the case for wires. The majority of torc wires are not twisted on themselves, and most neck-rings consist of uniform wires. Second, in order to balance the twist in flexible fibres, a Stage II or III spun yarn will usually involve elements of both S-spin and Z-spin (for example two clockwise or Z-spun yarns will usually be plied together in the anti-clockwise S-twist direction). The twist in rigid torc wires does not need to be balanced in the same way, and S is by far the most common direction of twist (although sometimes combinations of S- and Z-twist are used to give particular braid-like effects, see below). For this reason, in the metalwork catalogue the direction of twist/plying for multi-strand torc and bracelet constructions is not stated unless it is Z. Third and finally, apart from braided and plaited yarn structures and some modern art yarns, in textiles threads are usually plied together (whether tightly or loosely) without any attempt to create space between the plies. In torc neck-rings, this is just one of two main techniques by which wires are arranged:

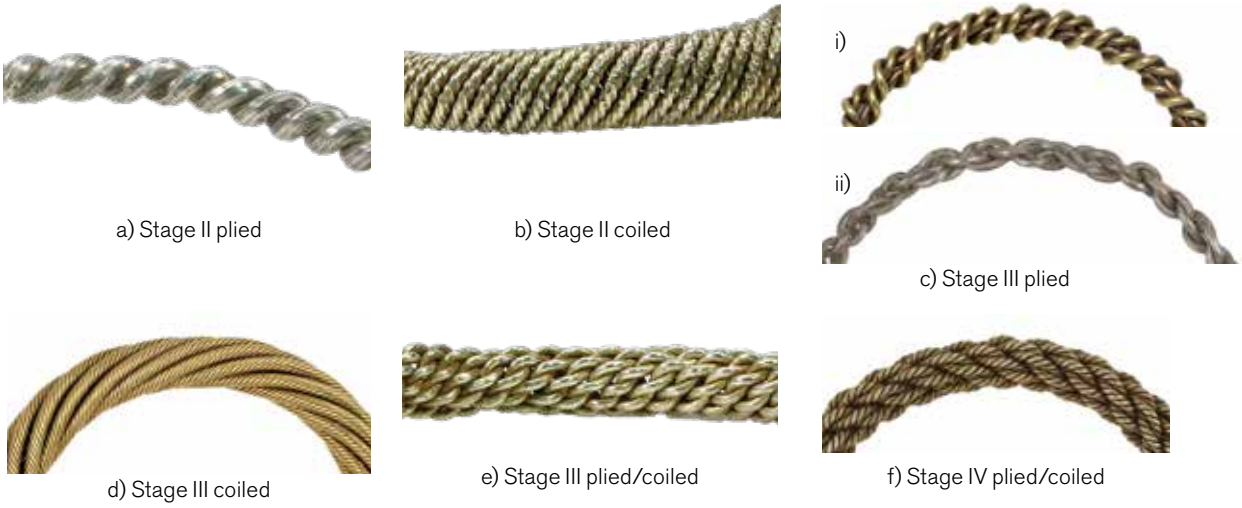
- *PLIED* – multiple wires (usually two) are twisted tightly or loosely together, as for yarns.
- *COILED* – multiple wires (usually three or more) are coiled around a flexible core (**Fig. 13.9**), possibly thin lengths of flexible wood or rope (see Ch. 19). Whilst on rare occasions this core is preserved, it is usually missing from the finished artefact, leaving a hollow void at the centre of a coiled tube. Yarns produced from plant or animal fibre would generally not be rigid enough to maintain a hollow core in this way.

Specific forms of multi-strand neck-ring construction were generally preferred for different terminal types. For example, the ropes of buffer terminal torcs are usually coiled, while torcs with loop terminals often have plied neck-rings.

Both PLYING and COILING can be either Z-twist or S-twist (**Fig. 13.10**), but the S direction predominates; just 11% of multi-strand Snettisham torcs and bracelets have a Z-twist element to their construction (though notably Hoards B and C have a higher proportion of Z-twist objects at 17%, see Ch. 20). S and Z are preferred here to the terms 'clockwise' and 'anti-clockwise', since the latter are relative terms which depend on the relationship between the maker and fibres or wires being twisted. In fibre spinning, and thus in textile-study terminology, 'clockwise' is used to denote Z-twist and 'anti-clockwise' denotes S-twist. However, this is based on the model of a spinner turning a spindle or similar tool which hangs away from them. If torc wires were instead clamped at the top and turned from below, then, from the perspective of the maker, a clockwise turn would be the direction to result in an S-twist. For the avoidance of confusion, we thus exclusively use the terms S-twist and Z-twist in the catalogue.

There are no clear-cut cases of Stage 1 (single wire) torcs or bracelets from Snettisham, although of course the narrow tubular torcs (Type 1 and Type 2, see above) have this appearance. There are a handful of cases where single solid wires may be from simple Stage I torc neck-rings (e.g. F.30b, S.67, S.68), but none of these have terminals attached, and they could equally be unused/unfinished wires or fragments from circular-section rings (such as F.1b, F.6a, F.6d and F7a).

Thus, the simplest wire torcs which can be securely identified as such have Stage II plied neck-rings (as **Fig. 13.11a**: two wires plied together into a single rope) or Stage II coiled neck-rings (as **Fig. 13.11b**: comprised of multiple wires coiled around a core, again creating a single rope). Stage III cable neck-rings consist of multiple plied ropes which are then themselves plied together (**Fig. 13.11c(i), (ii)**), or multiple coiled or plied ropes which are coiled together (**Figs 13.11d–e**). Wires which have been coiled at Stage II are not generally plied at Stage III. A very small number of torcs with Stage IV neck-rings were present at



a) Stage II plied

b) Stage II coiled

c) Stage III plied

d) Stage III coiled

e) Stage III plied/coiled

f) Stage IV plied/coiled

Figure 13.11 Neck-ring construction patterns seen in the Snettisham torcs (images not to scale)

Snettisham (F.119–F.120, H.7, L.1, L.21a, with B/C.62 and F.375 also possibly representing fragments of Stage IV objects). These combine two or more Stage III elements by plying or coiling to create complex cables (**Fig. 13.11f**).

To account for all possible arrangements of torc wires, the following notation has been developed (**Table 13.1**), based on the parenthetical notation employed for yarn by Splitstoser (2012). Because S-twist predominates, the direction of twist is not mentioned unless it is Z. Shaded information is included only for Stage III and IV neck-ring constructions. In the very rare cases of Stage IV neck-rings, an extra set of outer parentheses is also added, including **L**: the number of Stage III elements. The total number of wires in the neck-ring = **J** x **K** x **L**.

For example, the torcs in **Figure 13.11** can be described as follows:

13.11 (a) The rope of this Stage II neck-ring is made up of **2** wires which are **P**lied tightly together. The wires are **F**aceted in cross-section. The code for this structure is therefore **(2P)F**.

13.11 (b) The rope of this Stage II neck-ring is made up of **8** wires which are **C**oiled around a hollow core. The wires are **T**wisted. The code for this structure is therefore **(8C)T**.

13.11 (c)i) The cable of this Stage III neck-ring is made up of two Stage II plied ropes, each of which resembles the **(2P)** structure of **Figure 13.11a**. These **2** ropes are themselves **P**lied together. The wires are ci**R**cular in cross-section. The code for this structure is therefore **(2P(2P))R**. The total number of wires is 2x2=4.

13.11 (c)ii) This Stage III neck-ring is constructed in much the same way as that in **Figure 13.c(i)**, except that the **2** individual S-plied **(2P)** ropes are **P**lied together in the **Z**-twist direction, giving the code **(2PZ(2P))R**. The total number of wires is 2x2=4, as for **Figure 13.11c(i)**.

Note that in Stage III plied torc neck-rings, a purely S-twist construction (as in **Figure 13.11c(i)**) tends to give a more cramped and chaotic appearance, whereas introducing a stage of Z-twist (as in **Figure 13.11c(ii)**) creates a construction more akin to a balanced plied yarn, even resembling a braid.

13.11 (d) The cable of this Stage III neck-ring is made up of eight ropes, each of which resembles the **(8C)** structure seen in **Figure 13.11b**. These **8** Stage II coiled ropes are themselves **C**oiled together around a hollow core. All the wires are ci**R**cular in cross-section. This gives the code **(8C(8C))R**. The total number of wires is 8x8=64. Although the S-twist direction is used at each stage, the coiled ropes have a flatter profile than plied ropes, giving a smoother and more even structure than that seen in **Figure 13.11c(i)**.

13.11 (e) This Stage III cable is constructed from six Stage II ropes. Each rope resembles the **(2P)** structure of **Figure 13.11a**, except that they are plied together in the **Z**-twist direction, giving each rope the code **(2PZ)**. These **6** plied ropes are **C**oiled together S-twist. All the wires are ci**R**cular in cross-section, giving the full code **(6C(2PZ))R**. The total number of wires is 2x6=12. Note that the mixture of Z- and S-twist gives a more yarn-like structure than the uni-directional S-twist of **Figure 13.11d**.

13.11 (f) This is a Stage IV complex cable neck-ring. The basic Stage II components are sets of **3** wires **P**lied together with an S-twist **(3P)**. These are again **P**lied S-twist in sets of **3** to give Stage III elements with the code **(3P(3P))**. Finally, **4** of these Stage III elements are **C**oiled together in the opposite direction (**Z**-twist). All the wires are circular in cross-section, so the final code is **(4CZ(3P(3P)))**. The total number of wires is 4x3x3=36. As for **Figure 13.11e**, the combination of S- and Z-twist has created a pleasingly balanced yarn-like structure.

Around 350 identifiable multi-strand torcs/bracelets are represented at the site, compared to around 50 tubular torcs. Of the multi-strand objects, about 270 have enough surviving material for the neck-ring/body structure to be fully recorded. Around 70 of these are complete or near-complete, and the rest are fragments, the majority from Hoard F. Stage II neck-ring constructions are most common (73%), followed by Stage III (25.5%) and Stage IV (1.5%). Amongst the Stage II constructions, the most common by far was a simple plied structure (69%, the majority of them 2-ply), whilst coiled constructions accounted for the remaining 31%.

Wire diameter and neck-ring/body construction was clearly an element of overall multi-strand torc/bracelet design, and there are clear associations between more intricate neck-ring/body constructions, finer wire

(	K: No. Stage II elements (ropes), if a Stage III (cable) construction	Form of Stage III construction	(	J: No. Stage I elements (wires) in each Stage II element (rope)	Form of Stage II construction	)	)	Cross-section of Stage I elements (wires)
		C: Coiled			C: Coiled			Q: square
		P: Plied			P: Plied			R: circular
								F: faceted
								T: twisted

Table 13.1 Multi-strand neck-ring construction codes

diameters, and more complex or decorated terminal types (such as buffer, reel, and torus, which are the only types decorated with curvilinear La Tène-style motifs – Ch. 21). Curvilinear decoration appears on less than 1% of torcs/bracelets with Stage II constructions, around 12% of Stage III constructions, and 50% of the more complete Stage IV objects. Such decoration also appeared only on multi-strand torcs/bracelets with a wire diameter of 1.1–2.0mm and some tubular torcs. Ring and loop terminal torcs are more likely to be made of thicker wires or rods, and often show simpler neck-ring constructions.

Typology of other artefacts

Rings

Thick strips or bars of metal, most often wrought bars with rectangular cross-section, which are formed into a ring. These are broadly circular in plan, unless otherwise specified in the description. Terminals are often rounded or tapered, though sometimes broken or sharply cut. Four types are distinguished based on the position of the terminals:

- Penannular
- Abutted (terminals touching)
- Overlapping
- Spiral (terminals overlapping by more than half a turn).

Stead and Clarke (e.g. Clarke 1954, Stead 1991a) both interpreted these objects as 'ingot rings' (for smaller sizes) or 'ingot bracelets' (for larger sizes), suggesting that they were a stage in metalworking processes or intended for trade as a raw material, with a secondary function as items of dress (to be worn on fingers/toes or wrists, depending on size). The square or rectangular cross-section of many of the Snettisham rings could be seen to support the notion that they were not finished artefacts and may have been uncomfortable to wear.

We have deliberately avoided using the terms 'finger-ring', 'toe-ring' and 'bracelet' for these objects, as it is far from certain that they were intended to be worn in this way. Here we use 'ring' purely as a shape descriptor. Whilst we do not use the term 'ingot ring', it is, of course, entirely plausible that such artefacts were used as a stock of metal for recycling.

The rings at Snettisham come in a variety of sizes (**Figs 13.12, 13.13**). Whilst it is possible that some of these could have been worn on the body (on fingers, toes, wrists or ankles, or strung from other ornaments as part of composite groups, see below), the overall distribution of sizes does not support a neat division into functional categories. Were this the case, we would expect a clear binomial distribution of the diameters, with finger/toe-rings clustering at one end and bracelets at the other, and very few occupying the liminal zone of roughly 34–50mm in external diameter which would be very difficult to wear as either finger/toe-rings or bracelets.

In fact, all but the smallest of the Snettisham rings are too large to be finger-rings. Swift (2017) measured internal diameters of finger-rings from Roman burials of known age and sex, finding that rings buried with children were in the range 12–20mm (with a peak at 14mm), rings buried with adult men ranged from 16–22mm in internal diameter (peaking at 18mm), and those buried with adult women ranged from 13–20mm, with a peak at 17mm.

At Snettisham, there is a peak in frequency at around 20–34mm in external diameter, (internal diameters of roughly 17–31mm), accounting for 63 of the 99 measurable rings, with 53 of those above 24mm in external diameter (**Figs 13.12, 13.13**). The smallest could have been worn as finger-rings, but the trend towards larger sizes suggests that toe-rings are a more likely intended function if these were indeed worn on the body. There are 16 rings at 34.1-52mm in external diameter (approx. 35–49mm internally) most of which could not easily have been worn on fingers, toes or adult wrists. Finally, a long tail in the distribution accounts for 20 rings with varied external diameters from just over 52mm to 138mm.

In this volume, rings from Snettisham are classed by size: 'small' if they have an external diameter up to 34mm (giving an internal diameter of around 31mm). Such objects could have functioned as finger- or toe-rings. Above this, objects are categorised as 'large rings'. These sizes, as discussed, are too varied to indicate function.

Ingots

Linear ingots – straight metal bars, D-shaped to circular in section with rounded ends, making them somewhat cigar-shaped. They range in length from around 50–100mm.

Triangular ingots – metal lumps that have been created by melting material together in triangular-shaped crucibles, examples of which have been discovered on other Iron Age sites (e.g. Musson *et al.* 1991, 272–4).

Lump ingots – metal lumps without a distinguishing shape, but which appear to have been intentionally formed in some way, whether through casting or hammering. Generally sub-circular or oval in form, often hammered flat.

Amorphous lumps – unshaped lumps of metal. These range in size from very small examples to the substantial lumps of metal found in Hoard M. Possibly metalworking waste or a stage from metalworking processes, or unworked melted objects. These lumps sometimes include fragments of part-melted objects, see e.g. S.132–S.136.

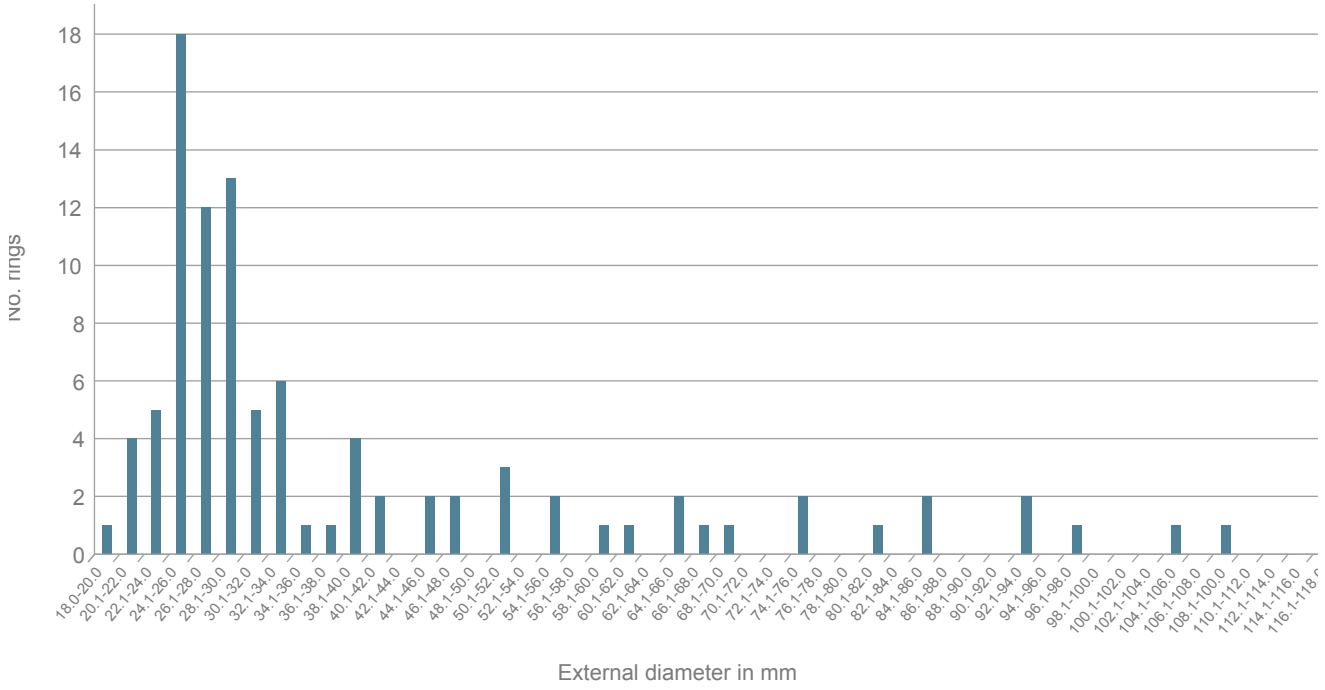


Figure 13.12 The external diameters of metal rings from Snettisham (internal diameters are generally around 3mm less than these values). This includes 98 of the 99 rings for which a reliable external diameter can be measured, omitting the outlier F.7a, which has a large external diameter of 13.8mm. Heavily distorted rings have been omitted, even if their circumference is complete, e.g. F.424 to F.427

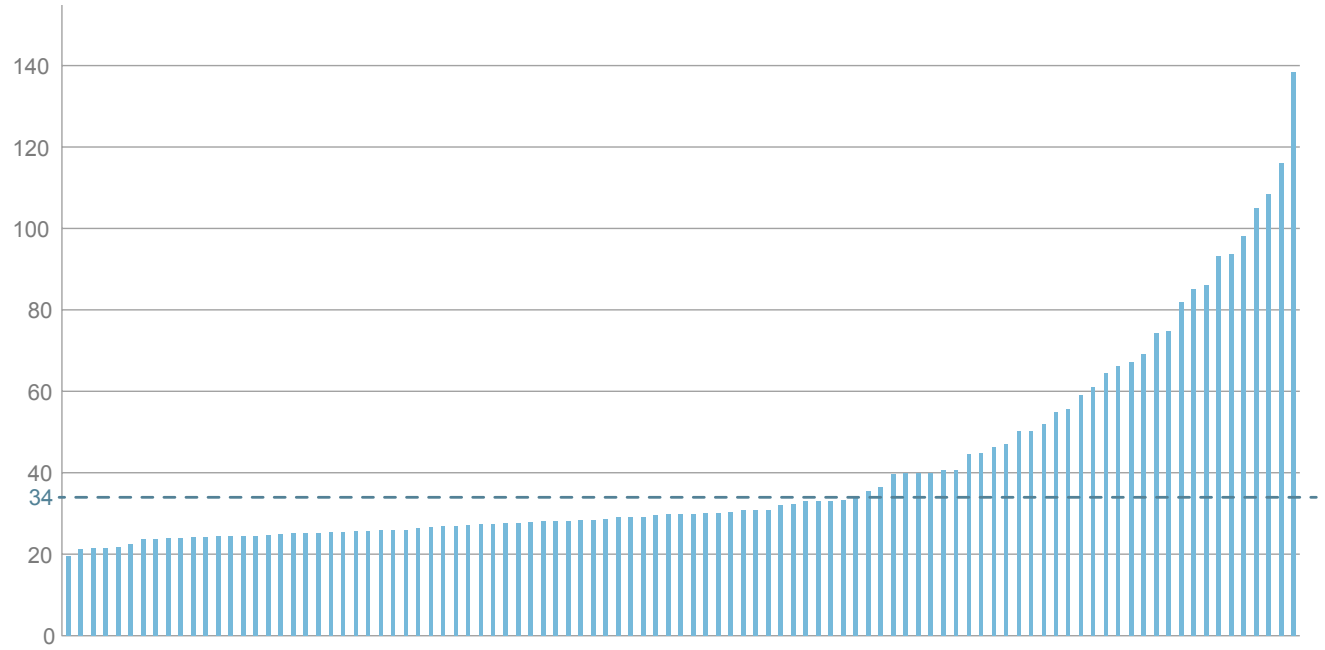


Figure 13.13 The external diameters of the 99 metal rings from Snettisham which were complete enough to allow a reliable measurement to be taken, ordered by size. Each bar represents one ring; the height of the bar shows the diameter. Heavily distorted rings have been omitted, as for Fig. 13.12

Linkage

Some artefacts, particularly within Hoard F, are linked. Collectively these are termed *COMPOSITE GROUPS*. In the catalogue, each composite group is covered under a single number. The different methods of linkage are defined as follows:

INTERLINKED – Where an artefact has been looped onto another, for example two rings, or a ring through the terminal of a torc.

INSERTED – Where one object has been inserted inside another and is either completely contained or partially protruding.

FUSED – Where an object has been attached to another by applying heat to partially melt the metal so fusing the two artefacts together.

PLIED/TWISTED – In one case (torcs H.2a and H.2b) two separate torcs have been twisted/plied together to make a single, composite torc.

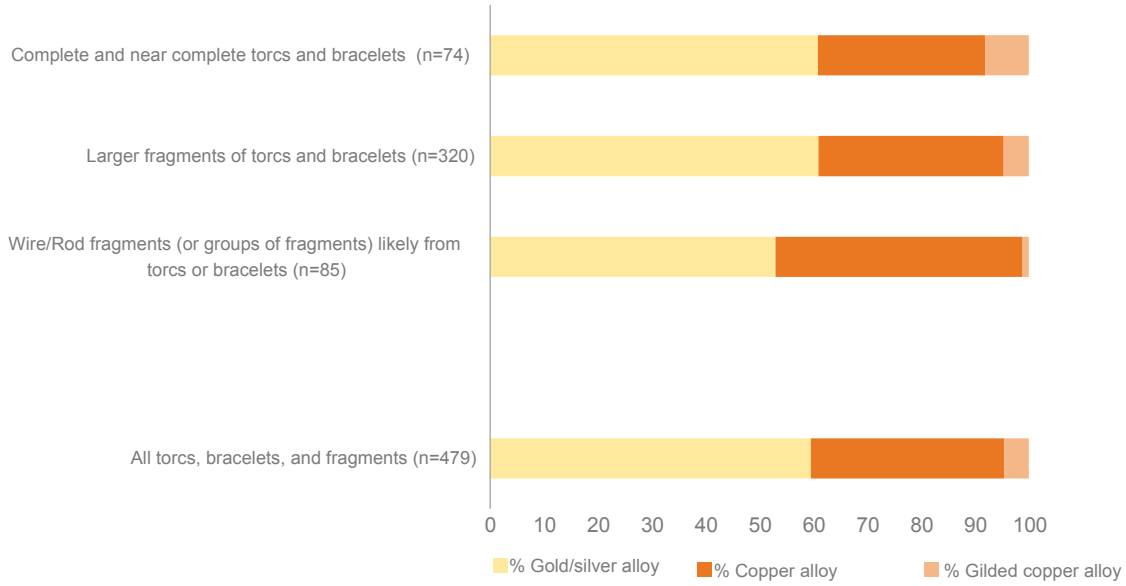


Figure 13.14 Relative proportions of different alloy types for torcs and bracelets from Snettisham, divided according to completeness of the objects

	Gold/silver alloy	Copper alloy	Gilded copper alloy (and possibly gilded)	Totals
Complete and near complete torcs and bracelets	44	23	7	**74**
Larger fragments of torcs and bracelets	195	110	15	**320**
Wire/Rod fragments (or groups of fragments) likely from torcs or bracelets	45	39	1	**85**
Totals	**284**	**172**	**23**	**479**

Table 13.2 Numbers of torcs, bracelets and related fragments from Snettisham, by alloy type

A note on alloys

In the catalogue, materials of the torcs are referred to as 'copper alloy' (for those torcs clearly exhibiting a greenish corrosion patina, some of which have been gilded) or 'gold/silver alloy' (for torcs where visual analysis suggests that precious metal content predominates). Many of the latter are ternary alloys of gold, silver and copper, and the group includes base alloys in which copper is the dominant component. Metallurgy and alloy composition are discussed extensively in Chapters 17 and 18, and Appendices 4 and 5 include results from surface analysis. Torcs which have been analysed have been recorded as such in the catalogue to allow cross-referencing.

It appears that the proportions of torc and bracelet components present in gold/silver vs. copper alloys vary for complete objects compared to smaller fragments (see **Table 13.2** and **Fig. 13.14**). For complete/near-complete torcs and bracelets and larger fragments, around 60% are of gold/silver alloy, whereas this falls to around 53% for fragments of wire/rod which likely derive from torcs or bracelets. This is likely due in large part to the fact that heavily corroded copper alloy objects are more likely to fragment post-deposition. (Although the counts in these figures group fragments which likely derive from the same object to avoid exacerbating this effect). However, although gilded copper alloy objects would be just as likely to fragment, a smaller proportion of fragmented pieces are gilded (or most likely gilded) compared to more complete objects (around 9% of complete or near-complete objects, around 5% of larger fragments, and 1% of wire fragments are likely gilded). This suggests that gilded torcs were less likely to be fragmented, or at least less likely to be deposited as fragments, than other copper alloy torcs. However, the results should be taken with caution since the data on gilding is only available for British Museum objects, and there has not been an exhaustive survey of all objects and fragments to check for traces of gilding. Thus this pattern could be an artefact of the sampling strategy rather than ancient depositional practices.

Chapter 14
Iron Age Hoards and other Metalwork

Julia Farley, Jody Joy and John Davies, with contributions by Nigel Meeks, Fleur Shearman and Sophia Adams

This chapter presents a full catalogue of the metalwork from the site, including both hoards and stray finds, bringing together the collections of both NCM and the BM. The majority of the finds are Later Iron Age (Phase 3), though Bronze Age to Earlier Iron Age (Phase 2) stray finds are included (S.1–10), as well as later Roman period (Phase 4–5) material from the site (Hoards M and P and a small number of stray finds). The Iron Age and Roman coins are covered in Chapter 15. The catalogue employs the typology and terminology set out in Chapter 13. This detailed catalogue is complemented by the summary of hoard contents given in Chapter 11. All finds are illustrated on the plates included in the catalogue, with the exception of stray finds of amorphous copper alloy lumps (S.141–S.234), and copper alloy sheet fragments with no original edges (S.340–S.351).

The hoards are presented first, in order of discovery (A, B, C, D, E, F, G, H, J, K, L, M, P), followed by stray finds and the very small number of non-hoard stratified finds from the 1990–2 excavations. The non-hoard finds are divided into two parts: Phase 2 finds, and Phase 3–4 (the latter further divided by find type).

The coins from the mixed torc/object hoards (B, C, E, F and P) and Hoard N (comprised exclusively of coins) are dealt with in Chapter 15, which covers hoard and stray finds of Iron Age and Roman coins.

Order and numbering

The material from Snettisham is complicated, and there is no single, simple way to group and order the finds. The approach taken in the catalogue has been designed to emphasise context (in terms of hoard groups, interlinked assemblages and order of recovery), rather than find type. In order to allow finds to also be studied and grouped by the object types they represent, a full listing by type is included at the end of Chapter 11.

Each object or fragment is given a number in the catalogue, starting with the hoard letter (or, in the case of stray and stratified finds, 'S.'). Composite groups of objects (where they have been linked, inserted or fused together, see Ch. 13) are given a single number. In cases of interlinking or insertion, where the individual elements of the composite group remain distinct and could (at least in theory) be separated, each component is given a part letter in the catalogue, e.g. D.1 is a composite group comprising torc D.1a and ring D.1b; wire fragment F.30b is inserted into the broken end of tubular torc fragment F.30a. Where fusing/melting has occurred, leaving the elements of the composite group permanently joined, they are treated under a single catalogue entry without part letters, e.g. F.32 is a fragment of tubular torc neck-ring fused onto part of a multi-strand torc/bracelet.

Hoards D and E each comprise a single composite group, listed under one number. For those hoards with multiple groups/objects where order of recovery or deposition cannot be ascertained (A, B, C, F, M, P), finds are ordered by object type, beginning with interlinked/composite groups. In the hoards subject to archaeological excavation (G, H, J, K and L), each find is given one number, assigned in the order in which the objects were recovered/lifted.

Other numbering and cataloguing systems that have previously been applied to the Snettisham material are

explained in Chapter 1, and a full concordance is given in Appendix 3.

Abbreviations used in the object catalogue

- Wt = weight
- D(ext) = maximum external diameter of torc, bracelet or ring
- D(nr) = average diameter of torc neck-ring or bracelet body in cross-section
- D(cable) = maximum diameter of individual cable in cross-section (for Stage IV neck-rings, see Ch. 13)
- D(rope) = maximum diameter of individual rope in cross-section (for Stage III/IV neck-rings, see Ch. 13)
- D(wire) = maximum diameter of individual wires or rods in cross-section
- D(term) = maximum diameter of torc or bracelet terminal
- L = maximum length. When the object is distorted or bent, this is the maximum dimension of the object as seen
- W = maximum width (for square or rectangular-section rings, this is in cross-section)
- T = maximum thickness (for square or rectangular-section rings, this is in cross-section)
- MSCC = Multi-strand component construction code, e.g. '(2P)R' (see detailed typology in Ch. 13)
- [Analysed: see Ch.] = Object scientifically analysed, see chapter listed for further results and discussion. Due to the complexities of cross-referencing with Clarke (1954), in some cases for the material from NCM it has not been possible to precisely identify the components analysed (see Ch. 18 and Appendix 5).

Hoard A

Found in 1948, a group of three near-complete Type 6 tubular torcs (A.1–3), and broken fragments of one or more additional examples (A.4–7), as well as a perforated gritstone pebble (A.8). Unless otherwise stated, objects were recovered during ploughing. Some fragments were retrieved during subsequent excavations carried out by Rainbird Clarke (1954). References to Clarke's catalogue entries are included below, and a full concordance with Clarke's catalogue appears in Appendix 3.

All the Hoard A torcs had suffered plough damage and were in crumpled condition when discovered. A.1, A.2 and A.3 have undergone restoration and some reconstruction (Ch. 16). A.1 and A.3 both have buffer terminals which have been joined together by conservators. Originally these separate components would have been articulated to slot and connect together, creating annular torcs with front and rear/dorsal muffs. Possible methods of attachment for these and similar torcs are discussed below and shown in **Figures 21.8–10**, and also described by Hautenauve (2005, 84–5) and Eluère (1987).

A.1: Gold alloy and iron tubular torc (Pl. 14.1)

TUBULAR (TYPE 6)
NCM: 1949.74.2
Published reference: Clarke 1954, 37; pls i, ii; Tubular Torc 1
[Analysed: see Ch. 17]

A large hollow Type 6 tubular torc with iron plug (see **Figs 17.4a–e, 21.8**). The smooth, bright yellow body comprises two tubular sections, one of which (shown on the left-hand side of the plate) is attached to two joining front buffer terminals and a dorsal muff. The muff has a border comprising narrow bands of filigree in herringbone pattern. The central zone of the muff is in raised relief, which carries a repeated device of a circle and two lobes. Each of the buffer terminals has a smooth, rounded central zone bordered by narrow cordons on each side. The other half of the torc (shown on the right-hand side of the plate) has more surface damage. The inner face of the neck-ring carries a row of 33 ring punch-marks, each being approximately 4mm in diameter. There are additional rows of 10 punch-marks on either side, at the front (see View A in **Fig. 21.8**). Clarke (1954, 37) noted that parts of the torc originally had a filling of beeswax and sand.

Notes from scientific analysis (Nigel Meeks)

This is the largest of the tubular torcs. Each of the two tubular neck-ring sections is about 50mm in diameter, made of thin sheet gold (*c.* 0.15mm). The tubes have folds and kinks in the sheet from damage, although they do maintain their general curved tubular shape. One tube is separate from the other components, while the other has an elaborate decorated dorsal muff with filigree wire band at one end and both of the large, hollow sheet terminals attached at the other end.

The terminal attached directly to the tube is correctly positioned, with the recessed lip of the tube passing into the terminal. The other terminal has been inserted onto (into?) the first terminal and fixed with modern adhesive materials, unlike in the original published photograph in Clarke (1954) where the terminals are each on their own half tube. Where they are visible, the exposed ends of the sheet seem to be rather ragged. The terminals were seemingly only fixed mechanically onto the tubes; there is no evidence of soldering here.

The separate tubular half is of hollow gold sheet with no added wire/filigree or sheet decoration, although it does have a series of punch-marks. On the inner curvature of one tube surface, a linear series of 13 small (4mm) round ring punch-marks have been made by a single punch tool used repeatedly (**Fig. 14.1**) and these cross a small square ancient repair patch soldered into and flush with the tube (see **Fig. 20.1**). There is evidence in places of a seam along the length around the outer side of the tube (**Fig. 14.2**).

The decorated dorsal muff is made from sheet gold, probably by a combination of repoussé for the deep ornamental designs followed by chasing to outline and define the front surfaces of the decoration (**Fig. 14.3a–b**). The two techniques are often used in conjunction to create a finished piece. There are lines of dot-punched decoration within the chased lines adding sharp details to the overall design (**Fig. 14.4**).

Of particular interest is the filigree wire decoration running around both ends of the decorated zone. Optical microscopy and radiography of details of the filigree wires (see **Fig. 17.4c–e**) show they are made of two wire ropes, lying adjacent to each other and minimally soldered

A.1

Plate 14.1

Figure 14.1 Line of circular punch marks that go over a soldered patch repair in A.1 (see also Fig. 20.1)

Figure 14.2 Seam on outer curve of the tube in A.1

Figure 14.3a–b Filigree wire and and repouseé/chased decoration on one terminal in A.1

Figure 14.4 Detail of repouseé/chased decoration on terminal in A.1

Figure 14.5 Plain wire bordering the twisted wires on terminal sheet with upturned edge in A.1

together and to the underlying sheet. Each rope is formed of a pair of wires twisted together. One of the pairs has been plied S-twist and the other Z-twist, giving the impression of a braid when they are viewed side by side. The plied wires are set between a parallel pair of wires of similar diameter to complete the design. This is clearly seen edge-on (**Fig. 14.5**). On one side of the terminal the soldered join between the ends of the filigree wires can be seen where the neatness loses its form (see **Fig. 17.4c**).

The torc has a unique rusted iron disc plug filling the whole end of the dorsal muff. At the centre of the plug the faint outlines of two rectangular rusted iron features are seen. Extending from behind the oblong pieces are two iron bars which meet and appear to be broken from an original

longer rod-like attachment. The radiograph (see **Fig. 17.4b**) clearly shows a broken, curved iron bar (presumably iron) within the gold tube of which one end extends towards the iron disc plug within the terminal, although judging by the reverse curvature it is probably broken from an original fixing point on the back of the disc.

There is no residual filling material within the hollow tubes but there may well have been a lightweight filler surrounding the central iron rod. This would have served to support the thin torc walls to prevent major denting or collapse during use. The torc is dented, but displays little polishing and use wear (see Ch. 20).

Wt: 449.3g; D(ext): *c.* 218mm (side to side); *c.* 240mm (front to back, including terminals and dorsal muff); D(nr): 50.0mm; D(term): 78.0mm (front terminals), 57.0mm (dorsal muff)

A.2: Gold alloy tubular torc (Pl. 14.2)
TUBULAR (TYPE 6)
NCM: 1949.74.1
Published reference: Clarke 1954, 38; pls i, ii; Tubular Torc 2
[Analysed: see Ch. 17 and Appendix 5]

Large, hollow Type 6 tubular torc (see **Figs 17.5, 21.9**). The smooth and bright yellow tubular body is separated into two equal halves, each with a buffer terminal. Both of the buffer terminals are smooth, rounded and bordered by narrow cordons at the open end. One neck-ring section (shown on the left-hand side of the plate) carries a single line of seven circular punch-marks on the inner curve (see View B in **Fig. 21.9**). The second piece (on the right-hand side of the plate) has a narrow decorative ring at the rear, decorated with beaded wire. The inner curve of the tube carries a row of 14 ring punch-marks at the buffer terminal end (see View C in **Fig. 21.9**). There is also a single ring stamp at the rear, on the outside of the curve.

Notes from scientific analysis (Nigel Meeks)
A large tubular torc with beaded wire decoration. The torc is an example of a two piece, apparently circular, torc that does not fit together properly. With the terminal ends together there is a gap of some 25mm at the other ends of the tubes. There appears to be a missing component that would have joined the torc ends together, presumably a dorsal muff similar to that on torc A.1. An appropriate spacer piece is shown in the suggested reconstruction illustrated in **Figure 21.9**.

The tubes are made from thin sheet gold (0.15mm) and there is a seam running down the inner curve of the tube where the sides of the sheet overlap and are soldered together (**Fig. 14.6**). The tubes are relatively unmarked or damaged, compared to A.1 and A.3. However, the tube shown on the left-hand side of the plate (and **Fig. 21.9**) has a long brittle fracture crack running on the inner side of the ring, adjacent to a line of 14 small (2.5mm) round ring punch-marks. The punch-marks all seem to be from the same tool, and the last one in the line has two additional small dots punched within the ring (**Fig. 14.7**). At one point there is a fold in the tube sheet that partly covers the mark indicating that the punch-marks were made before the folding occurred, presumably during bending to adjust the curvature of the tube (**Fig. 14.8**). The other tube of this torc (shown on the right-hand side of the plate and **Fig. 21.9**) has seven similar ring punch-marks in a similar position near to the terminal.

The non-terminal end of the tube on the left-hand side of the plate is open and somewhat jagged; there is no obvious fixing or mount for attachment of the dorsal muff. The end of the other tube has a decorative beaded wire ring soldered onto the outside (see **Fig. 17.5**). The sheet had first been worked to form a lip and trough to allow the beaded wire to fit snugly,

Figure 14.6. Soldered seam on inner curve in the tube of A.2

Figure 14.7 Fourteen punch marks and detail on A.2. Compare view b in Fig. 21.9

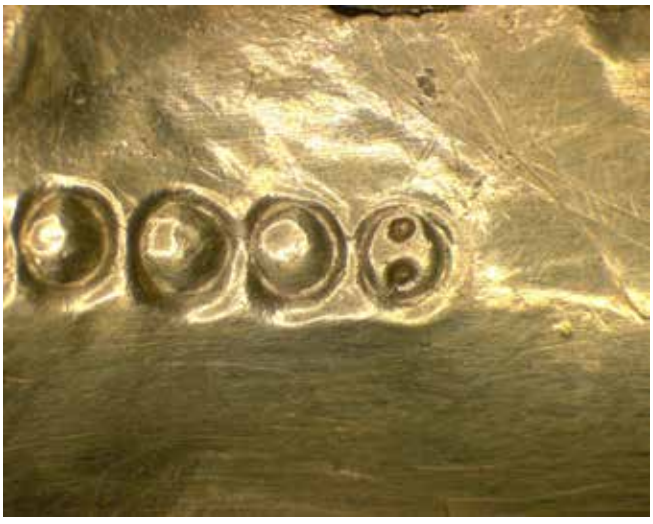


Plate 14.2

Figure 14.8. Circular punch marks along inner curve of tube and the kinked fold in the tube on A.2. Compare view c in Fig. 21.9. Note the brittle stress crack along the sheet tube

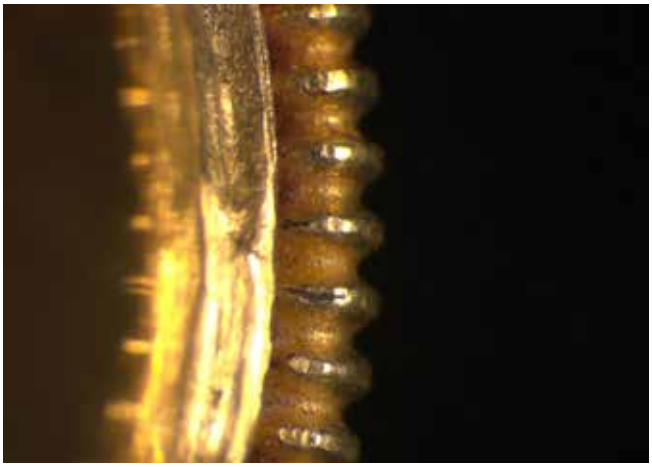


Figure 14.9 Circumferential groove just visible on centre bead of A.2

with the sheet wrapping round the wire a little from below (tube side), and into which it has been soldered, thus leaving a neat open-ended tube. Again, there is no internal fixing or material that might suggest the method of connecting the two tube ends together. The decorative wire is beaded only around two thirds of its length. The remaining wire is plain and clearly shows the original un-beaded wire diameter (see **Fig. 17.5**). The original wire was probably hammered into a round section. The plain wire is about 1.2mm in diameter, the beading is 1.5mm wide and bead spacing is 1.0mm. The plain region of the wire is on the inner curvature of the torc and may have been deliberately left smooth as this is the part of the torc that pressed on the neck during use, a plain wire being more comfortable than a beaded one.

The beaded wire is quite uniform in diameter and spacing showing a sophisticated use of a pre-formed beading tool (Whitfield 1998). There is clear evidence on some beads of the characteristic central circumferential groove that forms with the use of beading tools (**Fig. 14.9**). The metal is mechanically displaced and forced up into the rounded grooved tool and the circumferential groove forms where the two displaced sides meet. In this manner the beading is of similar workshop technology to much of the classical beaded wire commonly found on goldwork from the eastern Mediterranean and through into the medieval European periods (Whitfield 1998). The pre-formed beading tool used was clearly accurately made.

The two hollow terminals are of similar design to those of the other large torcs, and are of similar-thickness gold sheet to the tubes. The ends which attach to the tubes have a stepped flange design allowing them to be push-fitted onto the tubes with no evidence of soldering or other mechanical fixing to hold the terminals in place. The opposite open ends have exposed, rather rough or crudely finished sheet. It appears that a component is probably missing that covered these ends when fully assembled. Presumably the actual fittings to join the two halves of the torc were internal to the tubes, with the terminals seemingly acting as coverings for the joining mechanism, as evidenced by the part-remaining iron core in torc A.1. A possible joining mechanism is suggested in **Figure 21.9**.

Wt: 111.5g; D(ext): 187.0mm; D(nr): 32.0mm; D(term): 52.0mm

Figure 14.10 Flange for terminal fitting on A.3

A.3: Gold alloy and iron tubular torc (Pl. 14.3)
TUBULAR (TYPE 6)
NCM: 1949.74.3
Published reference: Clarke 1954, 38–9; pls i, ii; Tubular Torc 3
[Analysed: see Ch. 17 and Appendix 5]

Large hollow Type 6 tubular torc (see **Fig. 21.10**). The smooth, bright yellow hollow tubular body is separated into two sections. One (shown on the left-hand side of the plate) is attached to two joining buffer terminals. As with torc A.2, both of the buffer terminals are smooth, rounded and bordered by narrow cordons on the sides which join the neck-ring and each other. The neck-ring section which is attached to the terminals has suffered more damage. It is also decorated: on the inner face is a row of 13 stamps (each stamp comprising four dots in a square). The three stamps nearest the terminal are flanked on either side by three more such stamps, giving a block of nine (see View D in **Fig. 21.10)**. The second, separate neck-ring section (on the right-hand side of the plate) is plain and undecorated.

Notes from scientific analysis (Nigel Meeks)
This torc is another example of a two piece, apparently circular, tubular torc. It has two large hollow terminals of a stepped flange design similar to those of the other Hoard A torcs, which connect as loose push-fits onto the tubes with no evidence of soldering or other mechanical fixing to hold the terminals in place. They are now stuck together with modern glue. Presumably the ancient fixings were internal to the tubes, as evidenced by the part-remaining iron core in torc A.1; a mechanism suggested by Hautenauve (2005, 84–5) is depicted in **Figure 21.10**. The terminals seemingly act as coverings for the attachment. The tubes are quite marked and dented, and the one with the attached terminals is particularly crumpled and cracked showing the gold is in a work-hardened state. The terminals are of similar thickness gold sheet to the tubes.

On the tube not affixed to the terminals (on the right-hand side of the plate and **Fig. 21.10**), one end is of rather rough or crudely finished sheet with a slightly reduced

Figure 14.11 Ring support soldered to inside of tube on A.3. Compare view b-b on Fig. 21.10

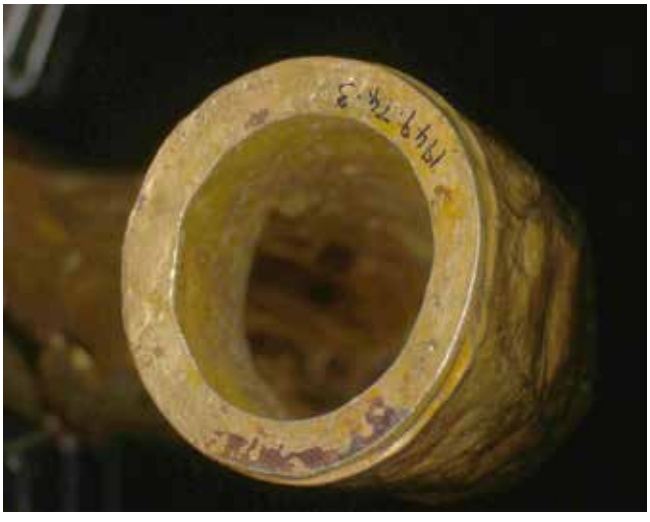


Plate 14.3

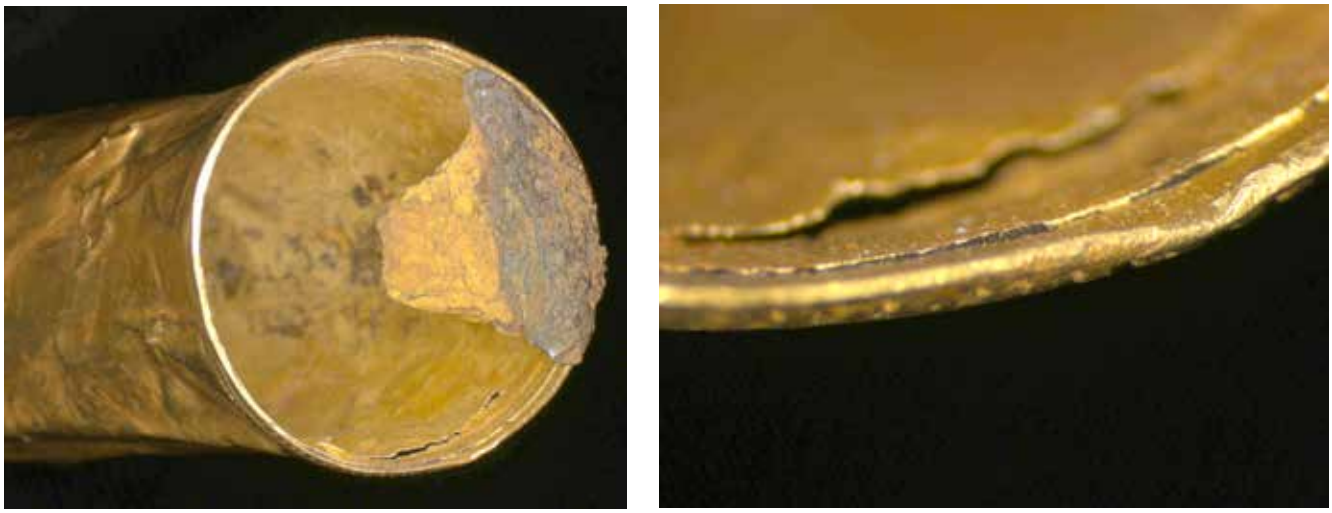


Figure 14.12 Thin sheet walls with band soldered to outside end of tube on A.3

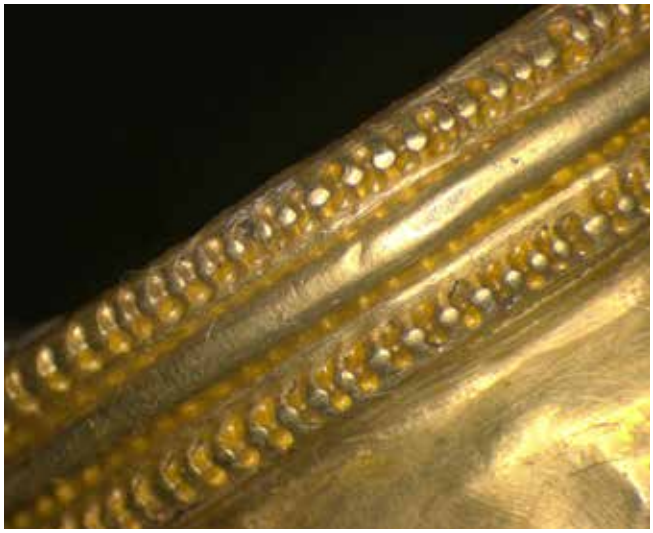


Figure 14.13 Decorative punched strip on A.3. Compare view c on Fig. 21.10

Figure 14.14 Punch marks on A.3. Compare view d on Fig. 21.10

Figure 14.15 Detail of punch mark group on A.3

diameter flange: this is the end which would originally have fitted into the terminal (**Fig. 14.10**). At the other end of this tube, a decorative band of punched gold strip is soldered onto the outside of the thin tubular sheet (**Figs 14.12–13**). The decorative strip has two parallel rows of regular knobbly punched decoration separated by two grooves and a central rounded ridge (**Fig. 14.13**). The punched pattern has two alternating components: a rounded peg standing proud with two broad supporting sides and a recessed dumbbell or figure of eight between, the whole producing the appearance of a tyre-tread pattern. Essentially the dumbbell-shaped punch was struck down sequentially into the rounded ridge of gold, probably resting on a small domed stake, leaving the proud pegs between the punch-marks. It was most probable that the thick, decoratively punched strip was made before soldering onto the outside of the tube, rather than punching *in situ* as there are no signs of the punching showing on the inside of the tube (**Fig. 14.12**).

On the section of tubular neck-ring attached to the terminals (on the left-hand side of the plate and **Fig. 21.10**), a wide circular ring is soldered inside the other end of the tube, forming a neat, plain end, unlike the rough-cut ends of other torcs (**Fig. 14.11**). This ring supports the tube to keep its shape. Presumably this would butt against the corresponding interface with the other tube, or interlock via a mechanism like that suggested in **Figure 21.10**, using a clip similar to that listed below as part of A.4. On this tube there is a line of rounded punch-marks in groups of four (**Figs 14.14–15**). The spacing between the marks in each set of four is quite regular which suggests a single four-pronged punch rather than a single point punch being extremely carefully aligned to make the accurate groups. The inner corners of the quad punch-marks are pointed to near right-angles, facing the centre, while the outer edges are curved.

Wt: 139.6g; D(ext): 202.0mm; D(nr): 33.0mm; D(term): 61.0mm

A.4

Plate 14.4

Remaining fragments of tubular torc(s) from Hoard A were all recorded by Clarke as 'A.4.' These pieces represent at least one additional torc, though some fragments could also have come from A.1–3 (see below). Here the key components are addressed separately (as A.4–7) for easier discussion and analysis.

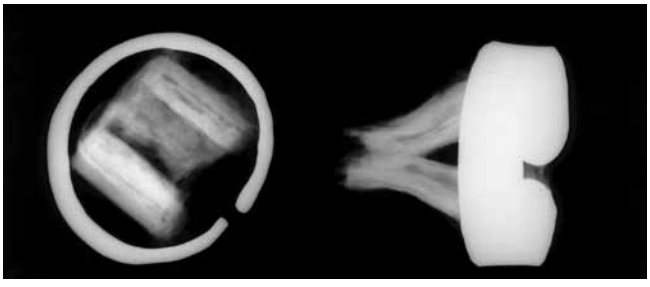
A.4: Gold alloy and iron tubular torc fragments (Pl. 14.4)
TUBULAR (TYPE 6)
NCM: 1949.74.6
Published reference: Clarke 1954, 39; Tubular Torc 4
[Analysed: see Ch. 17 and Appendix 5]
Context details: Found during ploughing and Rainbird Clarke excavations.

Six fragments of one or more gold Type 6 tubular torc(s):
- A piece of organic core material (top of the plate) which once fitted onto one of the core rods.
- Two portions of the original curved iron torc core (second from top on the plate), both with rectangular section.
- Terminal of a clasp or fixing mechanism (second from bottom on the plate, and shown in **Fig. 14.16**), comprising an iron core with gold strip binding around the edge. The back of this iron terminal narrows into a shank, which has a rectangular-shaped section.
- Two sheet fragments (shown at the bottom of the plate) which are made from a very fine sheet gold. They are both very fragile, with torn edges. They retain a curved profile but their once-smooth surface has been damaged.

Notes from scientific analysis (Nigel Meeks)
The radiograph of the iron and gold torc component (**Fig. 14.16**) gives an insight into the construction of this possible clip device. It would seem reasonable to suggest that this clip may well have been on the end of an iron core rod, as part of the attachment between two tubular torc halves, as illustrated in **Figure 21.10**. Hautenauve (2005, 84–5) suggests a possible association between this clasp or clip and the narrowed end of the neck-ring section of A.3 (seen on the left-hand side of the A.3 plate), into which it fits. It might have been part of A.3 or another similar torc.

Measurements
Body fragment 1: 180 x 40mm; 13.0g
Body fragment 2: 80 x 50mm; 5.7g
Clasp terminal: Head diameter 23mm; iron shank section 11 x 4mm; 19.4g
Curved iron core fragment 1: 170mm long; 29.8g

Figure 14.16 X-radiograph of iron clip (part of A.4)



Curved iron core fragment 2: 150mm long; 51.2g
Core material fragment: 61.0mm long; 29.5mm diameter; 11.9g

A.5–6: Pair of gold alloy tubular torc terminals (Pl. 14.5)
TUBULAR (TYPE 6)
Published reference: Clarke 1954, 39; pl. i; Tubular Torc 4
[Analysed: see Ch. 17]

Damaged buffer terminals from Type 6 tubular torc in the style of those recorded in A.1–A.3 above. The terminals are smooth, rounded and bordered by narrow cordons at their open ends.

A.5: NCM: 1949.74.4 (Pl. 14.5)
Wt: 9.1g; D(nr): 27.0mm; D(term): 49.0mm; W: 21.5mm

A.6: NCM: 1949.74.5 (Pl. 14.5)
Wt: 9.5g; D(nr): 27.0mm; D(term): 47.0mm; W: 23.5mm

Notes from scientific analysis (Nigel Meeks)
Two sheet gold terminals about 0.15mm thick. Terminal A.5 is largely intact with only a few small missing pieces, but with some cracks through the sheet. It is essentially undistorted and thus retains its original shape. Terminal A.6 is somewhat distorted, cracked and broken with some fragments missing.

They are each constructed from a single piece of gold sheet, there being no evidence of a seam either inside or out. The inside surface is a mottled texture (**Fig. 14.17**), not burnished, as one might expect from hammering onto a metal stake, suggesting these components were possibly hammered onto a softer, more textured material such as antler or wood.

The outside surfaces of the terminals are well burnished and polished. The terminals have been shaped on a former of some kind. Various stress cracks are found in the work-hardened sheet which has led to the loss of material.

The terminal design is the same as the other hollow sheet terminals with two flanges each side. The tubular torc neck-rings fit into these without any other fixing. Each terminal has one inner lip folded inwards while the other remains pointing outwards.

Figure 14.17 Textured inside surface of torc terminal A.5

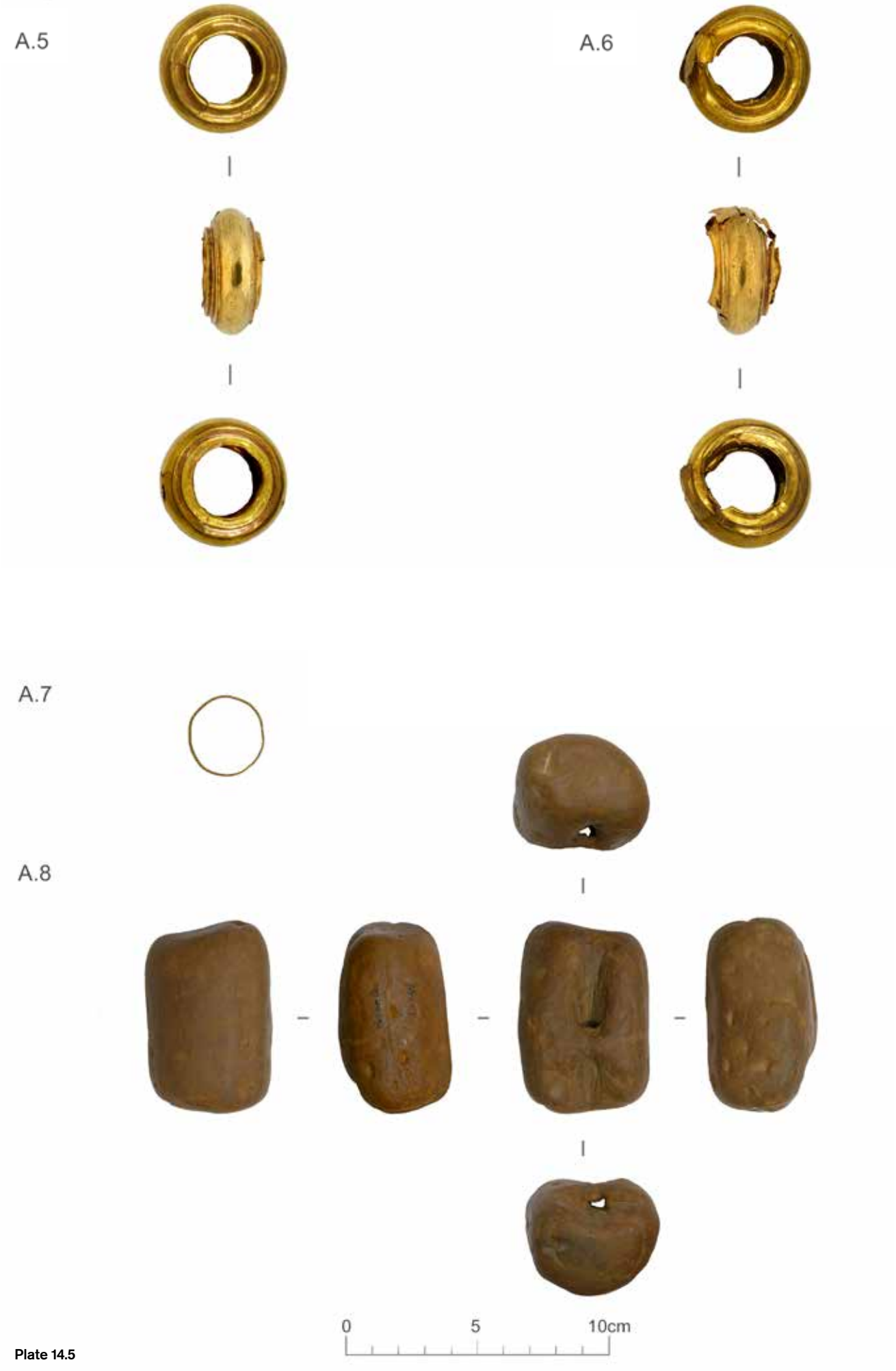


Plate 14.5

A.7: Gold alloy wire ring, likely a tubular torc component (Pl. 14.5)
?TUBULAR
NCM: 1949.74
Published reference: Clarke 1954, 39, pl. i; Tubular Torc 4
[Analysed: see Ch. 17]

Wire ring, made of two ropes soldered together, each formed from pairs of wires which have been plied together and then soldered. Most likely from a tubular torc. May be associated with the same fragmentary object as A.4–6; the ring circumference is the same as the inner circumference of terminals A.5–6. Alternatively, it could be an unused filigree wire decoration for soldering to a tubular torc, in the manner of the beaded wire on torc A.2; it is of similar wire diameter and ring circumference.

Notes from scientific analysis (Nigel Meeks)
The wires which make up A.7 are about 1mm thick individually, so the combined width of the two ropes lying parallel is about 2mm. The wires within each rope are soldered together, and the two adjacent ropes are also soldered together (see **Fig. 17.6**). Both ropes are plied in the same direction (S-twist). This gives an effect unlike the chevron design on the filigree wire of torc A.1 in which the adjacent clockwise and anti-clockwise twisted wires create a braid-like effect.

There is some evidence of diagonal lines on the wires that is indicative of strip twisting or block twisting (Oddy 1977). At the point where the original wire ends have looped round to meet and complete the ring, they have been intertwined and soldered together. This region also appears to have been hammered and filed to a compact oblong cross-section some 22mm long, unlike the rest of the ring where the wires remain in their original rounded section (**Fig. 14.18**).

The wires have a rough or lumpy surface texture that is symptomatic of excess solder having flowed over much of the wire when not fully molten. The solder between the twists of wire at their point of contact is dendritic, which is a common characteristic of solder. The adjacent pairs are soldered together where the wires touch, but not at every point of contact.

There are many flat points and well-worn surfaces on the exposed wires that reveal the core wire for EDX analysis. They seem to have been abraded after soldering which removed the surface solder in those places. At high magnification the surface of the solder shows the etched and meandering recrystallised grain boundaries with round porosity that commonly appear on ancient buried gold (**Fig. 14.19**).

Surface analyses were made of a few key regions where the twisted wires were soldered together. X-ray maps and also batch point analyses were also made in the same regions. The maps indicated some concentrations of silver and copper together, and point analyses confirmed that these corresponded to solder regions compared to lower values for wire regions. The results were somewhat variable due to effects of surface enrichment and burial. The following analyses appear to be reasonably representative of the wire and solder compositions in the region of the oblong section which has better geometry for analysis:

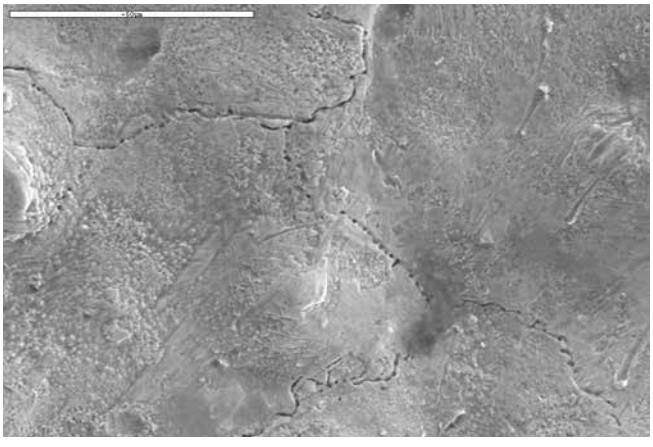
	Cu%	Ag%	Au%
Oblong region of ring			
Wires, mean:	0.6	13.8	85.6
Solder, mean:	2.2	22.0	75.8
Rounded twisted wire			
Wires, mean:	0.7	16.6	82.7
Solder, mean:	3.7	23.8	72.5

In both regions the solder appears to have significantly higher silver and copper content than the wire and hence has a lower melting point than the wire by some 50°C (see **Fig. 17.47a**). The solder is clearly made of an alloy with added copper. Gold with silver up to a content of about 25% (or more) could simply be natural silver-rich (alluvial) gold. Adding copper would lower the melting point further whilst maintaining the golden colour. The alloy composition of the wires is more like that seen in the gold sheet alloys of the BM collection (see **Table 17.2**) with higher gold than generally seen in the wires of the BM torcs. Conversely, the solder composition is more like the wire alloys of the BM torcs (see **Table 17.4**). This suggests a sound knowledge of the principles of alloying metallurgy, temperature characteristics and control for use on different types of object, components and solders.

Wt: 1.1g; D(term): 30.0mm; W: 1.8mm; T: 0.5mm

Figure 14.18 Wire ring. Detail of oblong section of soldered wires on A.7

Figure 14.19 SEM detail of surface of gold wire ring (A.7) showing meandering recrystallised grain boundaries. Scale bar is 50µm



A.8: Gritstone pebble (Pl. 14.5)
NCM: 1949.74.7
Published reference: Clarke 1954, 39; fig. 6
Smooth, oval-shaped pebble with perforation. The channel running through the stone (D-shaped in cross-section) suggests it may have been used to shape or finish wires, but there is no categorical evidence for this.
Wt: 244.5g; L: 74.0mm; W: 50.0mm; T: 44.0mm

Hoard B

Found in 1948. Unless otherwise stated, objects were recovered during ploughing. Some fragments were retrieved during subsequent excavations carried out by Rainbird Clarke (1954), and this is noted in their entries; some excavated fragments are mentioned in Clarke's text and others were identified through information written on the objects themselves.

There is substantial confusion around the contents of Hoards B and C. This publication follows Clarke (1954) in assigning objects between these hoards. Clarke's published references are included in the catalogue entries, and a full concordance with Clarke's catalogue appears in Appendix 3. Where objects were not illustrated in Clarke's publication, the correspondence with Clarke's numbering was ascertained based on descriptions and cross-referencing with annotated photocopies taken by Peter Northover in the 1980s (copies of which are held in the BM archive). Some material from Hoards B and C became intermixed shortly after discovery (see Ch. 4) and cannot be securely assigned to either hoard. This material appears under catalogue section 'Hoard B/C'.

Clarke published five iron nails as coming from Hoard B, and another five from Hoard C. He suggested that these were the remains of wooden boxes which once contained the two hoards. However, such large, rectangular-section iron nails are not a well attested Iron Age find type, and nor are these examples obviously sets, being varied in size, shape and appearance. Subsequent metal-detector survey of the field in the 1990s revealed many hundreds of comparable iron nails in a dense spread across the entire site, a sample of which have been retained at the BM for future study (1990,0409.31). It thus seems most likely that the nails initially believed to be associated with Hoards B and C are in fact part of this wider, almost certainly post-medieval scatter, and became associated with the hoard material only by the coincidence of their proximity. Nevertheless, Clarke's nails are included here for completeness, as B.29–33, and C.57–61.

B.1a–h: Composite group (interlinked) (Pl. 14.6)
Torc fragments and rings B.1b–h were all looped onto large ring B.1a
Context details: Found during Clarke's excavations, Trench 2, beneath a stone, adjacent to the gold coins from Hoard B.

B.1a: Gold/silver alloy large ring (Pl. 14.6)
NCM: 1949.75.24
Published reference: Clarke 1954, 54, no. 14; pl. xii, in group; Hd. B No. 7
[Analysed: see Appendix 5]
Complete gold/silver alloy large ring with overlapping terminals, each with a flat, tapered end. Made from a strip with rectangular section, with pronounced ribs along the upper and lower edges of the external face.
Wt: 28.6g; D(ext): 55.0mm; W: 8.0mm; T: 6.0mm

B.1b: Gold/silver alloy large ring (Pl. 14.6)
NCM: 1949.75.17
Published reference: Clarke 1954, 54, no. 13; pl. xii, in group; Hd. B No. 6
[Analysed: see Appendix 5]
Complete gold/silver alloy penannular large ring. Made from a strip with rectangular section, with pronounced ribs along the upper and lower edges of the external face. The ends are tapered.
Wt: 14.0g; D(ext): 40.0mm; W: 5.5mm; T: 2.0mm

B.1c: Gold/silver alloy small ring (Pl. 14.6)
NCM: 1949.75.9
Published reference: Clarke 1954, 56, no. 12; pl. xii, in group; Hd. B No. 10
[Analysed: see Appendix 5]
Complete gold/silver alloy small spiral ring with around 1 3/4 turns, made from a strip with rectangular cross-section. Slightly tapered ends.
Wt: 9.5g; D(ext): 26.0mm; W: 6.0mm; T: 2.0mm

B.1d: Copper alloy small ring (Pl. 14.6)
NCM: 1949.75
Published reference: Clarke 1954, 55, no. 1; pl. xii, bottom right of group; Hd. B No. 12
[Analysed: see Ch. 18]
Copper alloy small penannular ring, made from a strip with rectangular cross-section. Broken at one end and slightly rounded at the other.
Wt: 6.2g; D(ext): 24.0mm; W: 5.0mm; T: 2.0mm

B.1e: Gold/silver alloy torc/bracelet (Pl. 14.6)
NCM: 1949.75.72
Published reference: Clarke 1954, 46, no. 1; pl. xii, top left of group; Hd. B No. 13
[Analysed: see Appendix 5]
Gold/silver alloy loop terminal fragment from multi-strand torc/bracelet, made from a single loop of circular-section wire, with some flattened/faceted areas along its length. Cut at one end, with multiple chisel marks, other end original.
Wt: 4.7g; D(wire): 3.2mm; D(term): 19.0mm

B.1f: Gold/silver alloy torc/bracelet (Pl. 14.6)
MSCC: (5C)R
NCM: 1949.75.37
Published reference: Clarke 1954, 46, no. 3; pl. xii, no. 3 and in group, centre right; Hd. B No. 15
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of five circular-section wires coiled loosely together. The whole fragment has been bent into a rough penannular ring.
Wt: 6.2g; D(nr): 2.0mm; D(wire): 1.0mm; L: 40.0mm

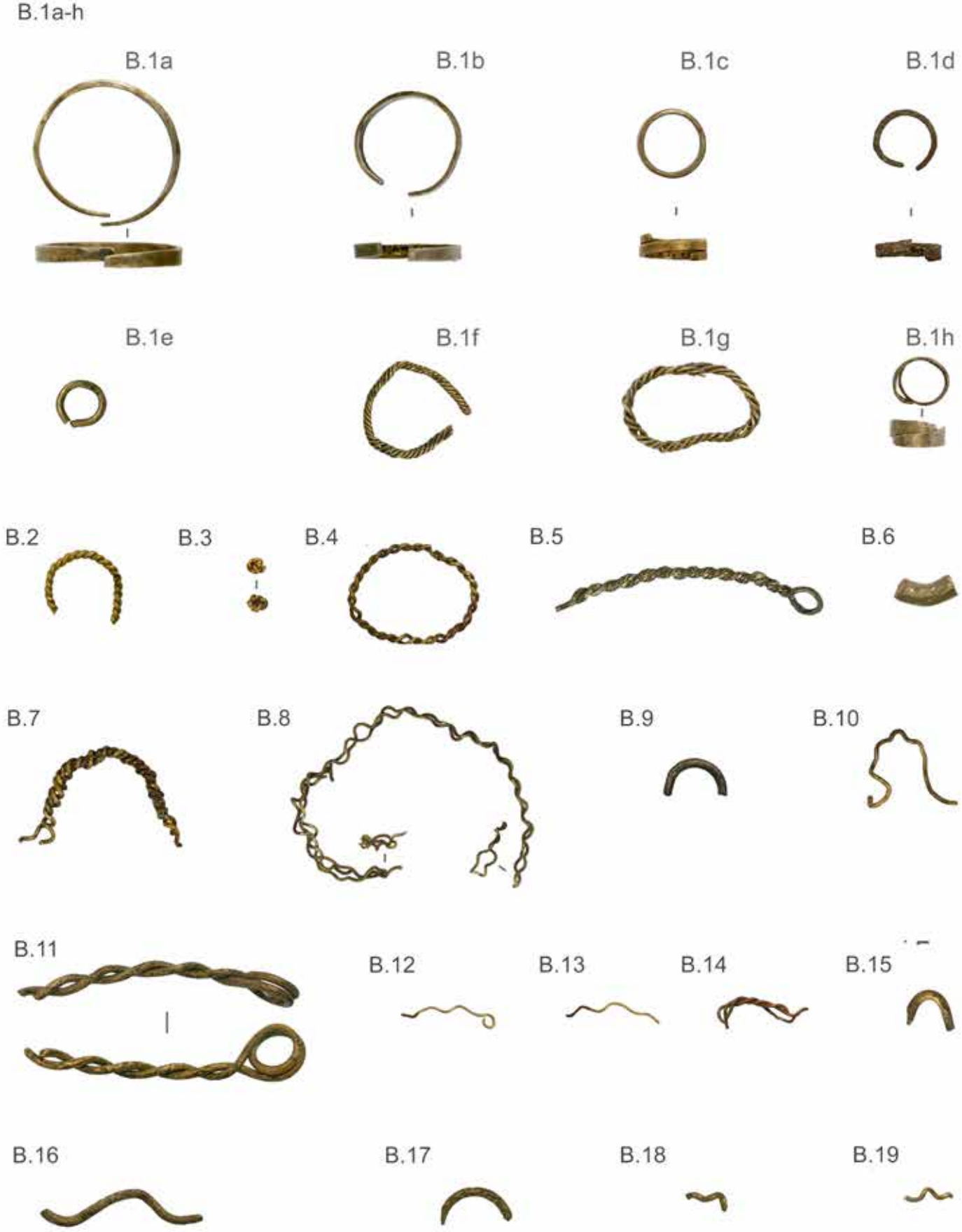

B.1a-h
B.1a
B.1b
B.1c
B.1d
B.1e
B.1f
B.1g
B.1h
B.2
B.3
B.4
B.5
B.6
B.7
B.8
B.9
B.10
B.11
B.12
B.13
B.14
B.15
B.16
B.17
B.18
B.19
0
5
10cm

Plate 14.6

B.1g: Gold/silver alloy torc/bracelet (Pl. 14.6)
MSCC: (4C)Q
NCM: 1949.75.40
Published reference: Clarke 1954, 46, no. 4; pl. xii, no. 4; Hd. B No. 16
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of four square-section wires coiled loosely together. The whole fragment has been bent into a sub-oval ring, with the ends threaded together.
Wt: 10.1g; D(nr): 3.0mm; D(wire): 1.0mm; L: 52.0mm

B.1h: Gold/silver alloy small ring (Pl. 14.6)
NCM: 1949.75
Published reference: Clarke 1954, 56, no. 14; pl. xii, bottom left of group; Hd. B No. 11
[Analysed: see Appendix 5]
Complete gold/silver alloy small ring, made from a strip with rectangular cross-section. Overlapping ends, with tapered terminals.
Wt: 4.9g; D(ext): 21.5mm; W: 7.5mm; T: 1.3mm

B.2: Gold/silver alloy torc/bracelet (Pl. 14.6)
MSCC: (2P)R
NCM: 1949.75.38
Published reference: Clarke 1954, 46, no. 2; pl. xii, no. 2; Hd. B No. 14
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied tightly together. The whole fragment has been bent into a U-shape.
Wt: 4.4g; D(nr): 2.0mm; D(wire): 1.3mm; L: 29.0mm

B.3: Gold/silver alloy torc/bracelet (Pl. 14.6)
MSCC: (2P)R
NCM: 1949.75.48
Published reference: Clarke 1954, 47, no. 8; pl. ix; Hd. B No. 20
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied tightly together. The whole fragment has been bent into a tight, tiny coil.
Wt: 2.2g; D(nr): 5.0mm; D(wire): 1.2mm; L: 8.0mm

B.4: Gold/silver alloy torc/bracelet (Pl. 14.6)
MSCC: (?2P)R
NCM: 1949.75.41
Published reference: Clarke 1954, 47, no. 7; pl. xii; Hd. B No. 19
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied very loosely together. It is possible that a third original ply is now missing. The whole fragment has been bent into an oval ring, with the cut ends abutting.
Wt: 6.7g; D(nr): 2.0mm; D(wire): 1.0mm; L: 49.0mm

B.5: Gold/silver alloy torc/bracelet (Pl. 14.6)
MSCC: (2P)T
NCM: 1949.75.15
Published reference: Clarke 1954, 47, no. 14; pl. ix; Hd. B No. 21
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one single-loop terminal and a length of neck-ring/body, cut at the other end. Stage II construction of two twisted square-section wires plied loosely together. The terminal is a continuous loop, with the wire having a faceted cross-section in this area, continuing into the square-section neck-ring wires. Possible evidence for a hammered join on the terminal.
Wt: 23.3g; D(nr): 2.0mm; D(wire): 2.4mm; D(term): 13.2mm; L: 99.0mm

B.6: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.6)
MSCC: (?P)F
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 15; pl. ix; Hd. B No. 22
[Analysed: see Appendix 5]
Context details: Found during Clarke's excavations, Trench 2.
Short length of gold/silver alloy faceted wire, cut at both ends. Most likely from multi-strand torc or bracelet; the wire is bent in a way which suggests it was originally part of a Stage II (or III) plied construction.
Wt: 12.1g; D(wire): 8.5mm; L: 24.0mm

B.7: Gold/silver alloy torc/bracelet (Pl. 14.6)
MSCC: (?3C)R
NCM: 1949.75.39
Published reference: Clarke 1954, 46, no. 5; Hd. B No. 17
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, unevenly cut at both ends – the wires do not all end at the same point. Stage II construction of three circular-section wires coiled very loosely together. It is possible that additional original wires are now missing. The whole fragment has been bent into a rough U-shape.
Wt: 10.4g; D(nr): 5.0mm; D(wire): 1.7mm; L: 61.0mm

B.8: Gold/silver alloy bracelet (Pl. 14.6)
MSCC: (?3P)R
NCM: 1949.75.16
Published reference: Clarke 1954, 46, no. 6; pl. ix; Hd. B No. 18
[Analysed: see Appendix 5]
Gold/silver alloy multi-strand loop terminal bracelet, which has been almost entirely untwisted. Seemingly originally of Stage II construction, formed from three circular-section wires plied together. Two wires survive more or less intact, one is broken off only a short distance from the terminal. Terminals originally a continuous loop at each end, with ends of the wire meeting in the body of the bracelet.
Wt: 14.9g; D(nr): 5.0mm; D(wire): 1.0mm; L: 91.0mm

B.9: Gold/silver alloy torc/bracelet (Pl. 14.6)
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 20; Hd. B No. 24
[Analysed: see Appendix 5]
Fragment of loop terminal, from gold/silver alloy multi-strand torc/bracelet. Made from circular-section wire, broken at one end, with flat, tapering terminal at the other.
Wt: 3.4g; D(wire): 3.9mm; L: 23.8mm

B.10: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.6)
NCM: 1949.75
Bent/curving fragment of circular-section gold/silver alloy wire, cut at both ends. Most likely from a multi-strand torc neck-ring or bracelet body which has been untwisted.
Wt: 0.5g; D(wire): 1.0mm; L: 36.0mm

B.11: Copper alloy torc/bracelet (Pl. 14.6)
MSCC: (2P)R
NCM: 1949.75.30
Published reference: Clarke 1954, 47, no. 19; pl. ix; Hd. B No. 23
Fragment of copper alloy multi-strand torc or bracelet, comprising one continuous double-loop terminal and a length of neck-ring/body, cut at the other end. Stage II construction of two circular-section wires plied loosely together.
Wt: 19.2g; D(nr): 10.0mm; D(wire): 3.0mm; D(term): 22.0mm; L: 105.0mm

B.12–13: Gold/silver alloy wire/?bracelet (Pl. 14.6)
NCM: 1949.75
B.12 and B.13 are very similar in form and wire-diameter, and may be part of the same object.

B.12: Fragment of gold/silver alloy wire, broken at both ends, wavy or coiled in from. Possibly part of the body of a fine multi-strand bracelet.
Wt: 0.4g; D(wire): 0.8mm; L: 35.0mm

B.13: Fragment of gold/silver alloy wire, broken at both ends. Small loop at one end may be a terminal, the rest of the wire is wavy or coiled in from. Possibly the loop terminal and part of the body of a fine multi-strand bracelet.
Wt: 0.5g; D(wire): 0.8mm; L: 35.0mm

B.14: Copper alloy torc/bracelet (Pl. 14.6)
MSCC: (?3P)R
NCM: 1949.75
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together. The ply is very loose, suggesting that there may originally have been one or more additional strands.
Wt: 1.5g; D(nr): 3.0mm; D(wire): 1.0mm; L: 36.0mm

B.15: Copper alloy wire/?torc/?bracelet (Pl. 14.6)
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 20; Hd. B No. 24
[Analysed: see Ch. 18]
Curved fragment of circular-section copper alloy wire, broken at both ends. Perhaps part of a multi-strand torc or bracelet.
Wt: 3.4g; D(wire): 3.9mm; L: 19.3mm

B.16: Copper alloy wire/?torc/?bracelet (Pl. 14.6)
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 21; Hd. B No. 25
[Analysed: see Ch. 18]
Curved fragment of circular-section copper alloy wire, cut at one end and broken at the other. Perhaps part of a multi-strand torc or bracelet.
Wt: 5.5g; D(wire): 3.2mm; L: 60.8mm

B.17: Copper alloy torc/bracelet (Pl. 14.6)
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 20; Hd. B No. 24
[Analysed: see Ch. 18]
Context details: Found during Clarke's excavations, Trench 2.
Fragment of loop terminal, from copper alloy multi-strand torc/bracelet, broken at both ends. Made from circular-section wire.
Wt: 2.6g; D(ext): 27.0mm; D(wire): 3.0mm; W: 26.5mm

B.18: Copper alloy wire/?torc/?bracelet (Pl. 14.6)
NCM: 1949.75
Fragment of circular-section copper alloy wire, cut at both ends. Perhaps part of a multi-strand torc or bracelet; the curvature of the fragment suggests it was originally part of a coiled construction.
Wt: 0.7g; D(wire): 1.6mm; L: 15.5mm

B.19: Copper alloy wire/?torc/?bracelet (Pl. 14.6)
NCM: 1949.75
Fragment of circular-section copper alloy wire, cut at both ends. Perhaps part of a multi-strand torc or bracelet; the curvature of the fragment suggests it was originally part of a coiled construction.
Wt: 0.7g; D(wire): 1.5mm; L: 18.7mm

B.20: Gold/silver alloy large ring (Pl. 14.7)
NCM: 1949.75.13
Published reference: Clarke 1954, 54, no. 12; Hd. B No. 5
[Analysed: see Appendix 5]
Gold/silver alloy large penannular ring, made from a strip with rectangular cross-section. One blunt, slightly tapered terminal and one cut end.
Wt: 20.9g; D(ext): 98.0mm; W: 9.5mm; T: 1.8mm

B.21: Gold/silver alloy large ring in three parts (Pl. 14.7)
Published reference: Clarke 1954, 54, no. 11; Hd. B No. 3
Three joining sections of a single gold/silver alloy large ring, each fragment broken at both ends. Made from a strip with rectangular cross-section, with pronounced ribs along the upper and lower edges of the external face.
Context details: Found during Clarke's excavations, Trench 2.

Part 1: NCM: 1949.75.26
Wt: 12.2g; L: 71.2mm; W: 5.0mm; T: 3.3mm

Part 2: NCM: 1949.75
Wt: 5.2g; L: 40.5mm; W: 4.8mm; T: 2.7mm

Part 3: NCM: 1949.75
Wt: 3.4g; L: 27.4mm; W: 5.0mm; T: 2.8mm

B.22: Gold/silver alloy large ring in two parts (Pl. 14.7)
Published reference: Clarke 1954, 54, no. 11; Hd. B No. 3
Two joining sections of a single gold/silver alloy large ring. Made from a strip with rectangular cross-section, with pronounced ribs along the upper and lower edges of the external face.
Context details: Found during Clarke's excavations, Trench 2.

Part 1: NCM: 1949.75
One original, blunt terminal, the other end broken.
Wt: 6.2g; L: 49.4mm; W: 5.0mm; T: 2.5mm

Part 2: NCM: 1949.75
Broken at both ends.
Wt: 8.1g; L: 56.0mm; W: 5.4mm; T: 2.7mm

B.23: Gold/silver alloy large ring in two parts (Pl. 14.7)
Published reference: Clarke 1954, 54, no. 11; Hd. B No. 3
Two joining sections of a single gold/silver alloy large ring . Made from a strip with rectangular cross-section, with pronounced ribs along the upper and lower edges of the external face.
Context details: Found during Clarke's excavations, Trench 2.
Broken at both ends.

Part 1: NCM: 1949.75
Formed from two re-joined fragments, broken at both ends.
Wt: 12.0g; L: 71.5mm; W: 5.1mm; T: 2.8mm

Part 2: NCM: 1949.75
Wt: 10.0g; L: 65.2mm; W: 5.3mm; T: 2.7mm

B.24: Gold/silver alloy large ring in three parts (Pl. 14.7)
Published reference: Clarke 1954, 54, no. 15; Hd. B No. 4
[Analysed: see Appendix 5]
Three fragments, most likely from a single gold/silver alloy large penannular ring. Each made from a strip with rectangular cross-section, with pronounced ribs along the upper and lower edges of the external face.

Part 1: NCM: 1949.75.84
Broken at both ends.
Wt: 11.4g; L: 75.0mm; W: 5.0mm; T: 3.0mm

Part 2: NCM: 1949.75
Broken at both ends.
Wt: 13.9g; L: 81.5mm; W: 5.0mm; T: 3.0mm

Part 3: NCM: 1949.75
One original, tapered end, the other polished for metallography.
Wt: 9.0g; L: 63.0mm; W: 5.0mm; T: 3.0mm

B.25: Gold/silver alloy small ring (Pl. 14.7)
NCM: 1949.75.46
Published reference: Clarke 1954, 56, no. 11; pl. xii; Hd. B No. 9
[Analysed: see Appendix 5]
Context details: Found during Clarke's excavations, Trench 2.
Gold/silver alloy small ring, made from a strip with rectangular cross-section. Overlapping ends: one broken, the other slightly tapered.
Wt: 11.0g; D(ext): 25.0mm; W: 8.0mm; T: 2.0mm

B.26: Gold/silver alloy linear ingot (Pl. 14.7)
NCM: 1949.75.51
Published reference: Clarke 1954, 58 (cake), no. 2; pl. xiii, upper; Hd. B No. 2
Context details: Found during Clarke's excavations, Trench 2.
[Analysed: see Appendix 5]
Gold/silver alloy linear ingot. Rectangular in cross-section, with flattened top and bottom faces and flat, parallel long sides. The narrower ends are rounded, giving the ingot a sub-rectangular or oval shape in plan.
Wt: 19.2g; L: 29.0mm; W: 13.0mm; T: 4.0mm

B.27: Gold/silver alloy lump ingot (Pl. 14.7)
NCM: 1949.75
Published reference: Clarke 1954, 58 (cake), no. 1; pl. xiii, upper; Hd. B No. 1
Context details: Found during Clarke's excavations, Trench 2.
[Analysed: see Appendix 5]
Gold/silver alloy lump ingot, sub-circular in plan, hammered flat, with rounded edges. Clear hammer marks on each flat face.
Wt: 10.7g; L: 18.5mm; W: 16.5mm; T: 4.0mm

B.28: Copper alloy clamp (Pl. 14.7)
NCM: 1949.75.41
Published reference: Clarke 1954, 58 (Misc.), no. 1; pl. xiii, lower, Misc. 1; Hd. B No. 8
Context details: Found during Clarke's excavations, Trench 2.
[Analysed: see Ch. 18]
U-shaped copper alloy clamp, resembling a large staple. Rectangular in cross-section.
Wt: 1.1g; L: 25.0mm; T: 1.5mm

B.29–33: Five iron nails (likely post-medieval and not in fact directly associated with Hoard B)
Not pictured.
NCM: 1949.75
Published reference: Clarke 1954, 58 (Misc.), no. 3; Hd. B No. 26
Context details: Hoard B; Found during Rainbird Clarke excavations.

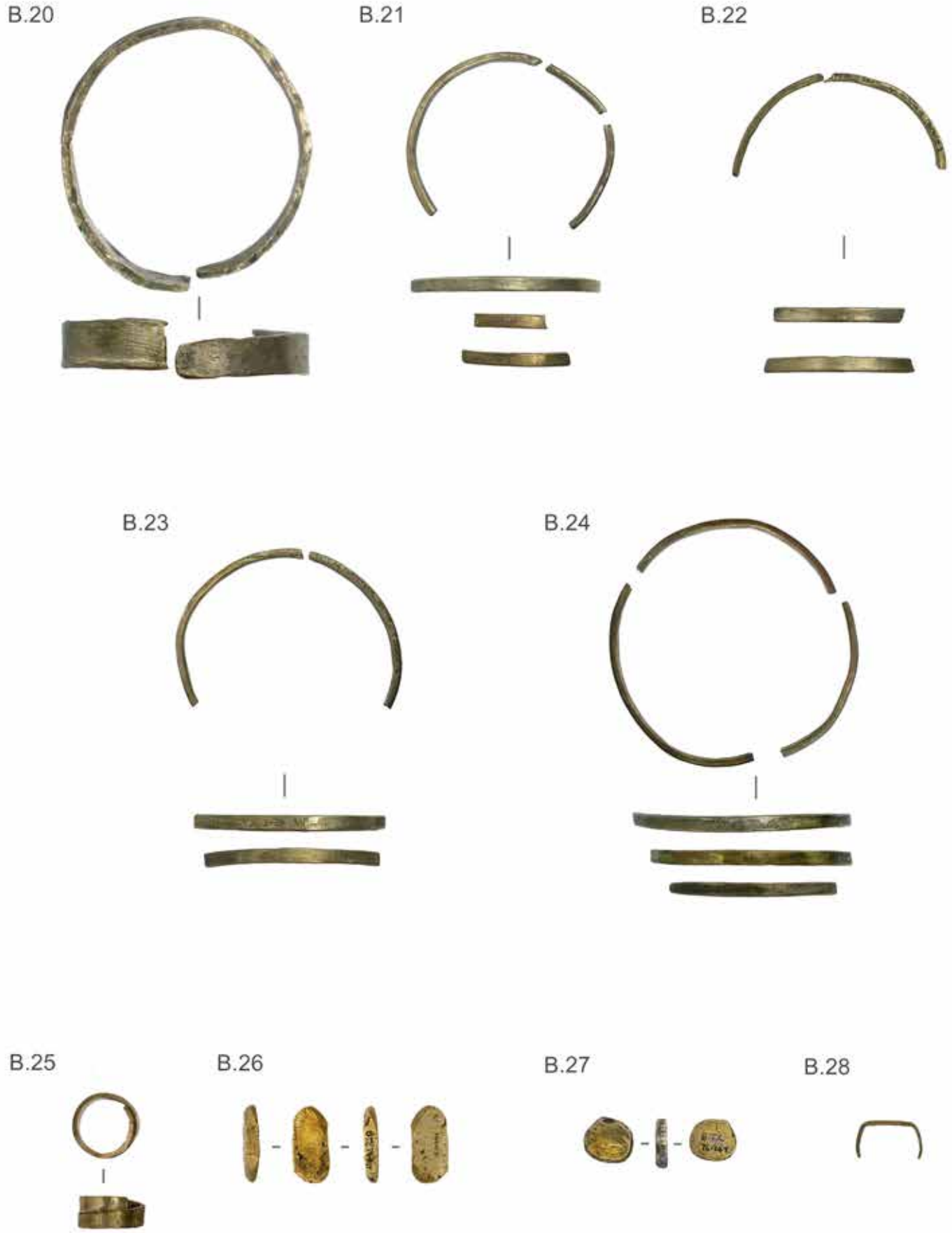


Plate 14.7

All are iron nails with rectangular-section shanks. B.29 and B.33 have circular heads.

B.29: Wt: 4.6g; D: 8.0mm (head); L: 48.0mm; W: 5.5mm; T: 5.0mm
B.30: Wt: 8.5g; L: 51.0mm; W: 10.5mm; T: 4.2mm
B.31: Wt: 7.0g; L: 66.0mm; W: 9.5mm; T: 5.0mm
B.32: Wt: 15.7g; L: 61.0mm; W: 12.0mm; T: 8.5mm
B.33: Wt: 1.4g; D: 5.5mm (head); L: 48.0mm; W: 3.0mm; T: 2.0mm

Hoard C

Found in 1948. Unless otherwise stated, objects were recovered during ploughing. Some fragments were retrieved during subsequent excavations carried out by Rainbird Clarke (1954), and this is noted in their entries; identification of excavated fragments is based on Clarke's text and information written on the objects themselves.

There is substantial confusion around the contents of Hoard B and C (see introduction to Hoard B catalogue).

Clarke published five iron nails as coming from Hoard C. These are now believed to be post-medieval (see introduction to Hoard B catalogue), but are included here for completeness as C.57–61.

C.1–5: Gold/silver alloy torc/bracelet (Pl. 14.8)
MSCC: (4C)R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 12; Hd. C No. 16
[Analysed: see Appendix 5, and Ch. 19 for identification of the wood]

Five fragments of gold/silver alloy multi-strand torc neck-ring or bracelet body, each cut or broken at both ends. Stage II construction of four circular-section wires coiled together around a hollow core.

C.1: Wt: 2.0g; D(nr): 4.0mm; D(wire): 1.0mm; L: 34.0mm
C.2: Wt: 1.8g; D(nr): 4.0mm; D(wire): 1.0mm; L: 30.0mm
C.3: Wt: 1.9g; D(nr): 4.0mm; D(wire): 1.0mm; L: 26.0mm
C.4: Wt: 1.4g; D(nr): 4.0mm; D(wire): 1.0mm; L: 19.0mm
C.5: Wt: 1.0g; D(nr): 4.0mm; D(wire): 1.0mm; L: 18.0mm

C.6: Gold/silver alloy rod/?torc/?bracelet (Pl. 14.8)
NCM: 1949.75.50
Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
[Analysed: see Appendix 5]
Curved fragment of circular-section gold/silver alloy rod, most likely from a multi-strand torc or bracelet. Cut at both ends.
Wt: 5.2g; D(wire): 7.0mm; L: 24.0mm

C.7–18: Gold/silver alloy rod/wire/?torc/?bracelet (Pl. 14.8)
NCM: 1949.75
[Analysed: see Appendix 5]
C.7–18 are short lengths of gold/silver alloy circular-section (or lightly faceted) rod/wire, which may originally have been part of a multi-strand torc or bracelet. The fragments are similar in form, and some may be from the same torc. Clear cut-marks show that the object, or objects, were deliberately broken up before deposition. C.14 and C.17 are likely fragments from loop terminals, the other fragments are either too short to identify (C.7, C.8, C.11, C.15, C.16, C.18) or display a curvature which suggests they are more likely to be from the neck-ring/body of a Stage II (or III) plied torc or bracelet (C.9, C.10, C.12, C.13).

C.7: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends, little survives.
Wt: 3.1g; D(wire): 7.0mm; L: 10.5mm

C.8: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends, little survives.
Wt: 3.5g; D(wire): 7.0mm; L: 14.0mm

C.9: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Context details: Found during Clarke's excavations, Trench 20.
Cut at both ends.
Wt: 10.1g; D(wire): 6.8mm; L: 20.0mm

C.10: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends.
Wt: 7.0g; D(wire): 6.5mm; L: 32.8mm

C.11: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends, little survives.
Wt: 3.3g; D(wire): 6.5mm; L: 8.5mm

C.12: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends, with multiple blows visible. The surface is damaged, suggesting the fragment has been hammered.
Wt: 7.6g; D(wire): 6.0mm; L: 20.0mm

C.13: Published reference: Clarke 1954, 47, no. 11; pl. ix; Hd. C No. 14
Cut at both ends.
Wt: 11.8g; D(wire): 6.0mm; L: 32.0mm

C.14: Published reference: Clarke 1954, 47, no. 10; Hd. C No. 13
Short, curved length of wire, most likely part of a loop terminal. Cut with a double-bladed implement at both ends, or possibly hammered until it broke.
Wt: 12.0g; D(wire): 6.0mm; L: 38.0mm

C.15: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends, little survives.

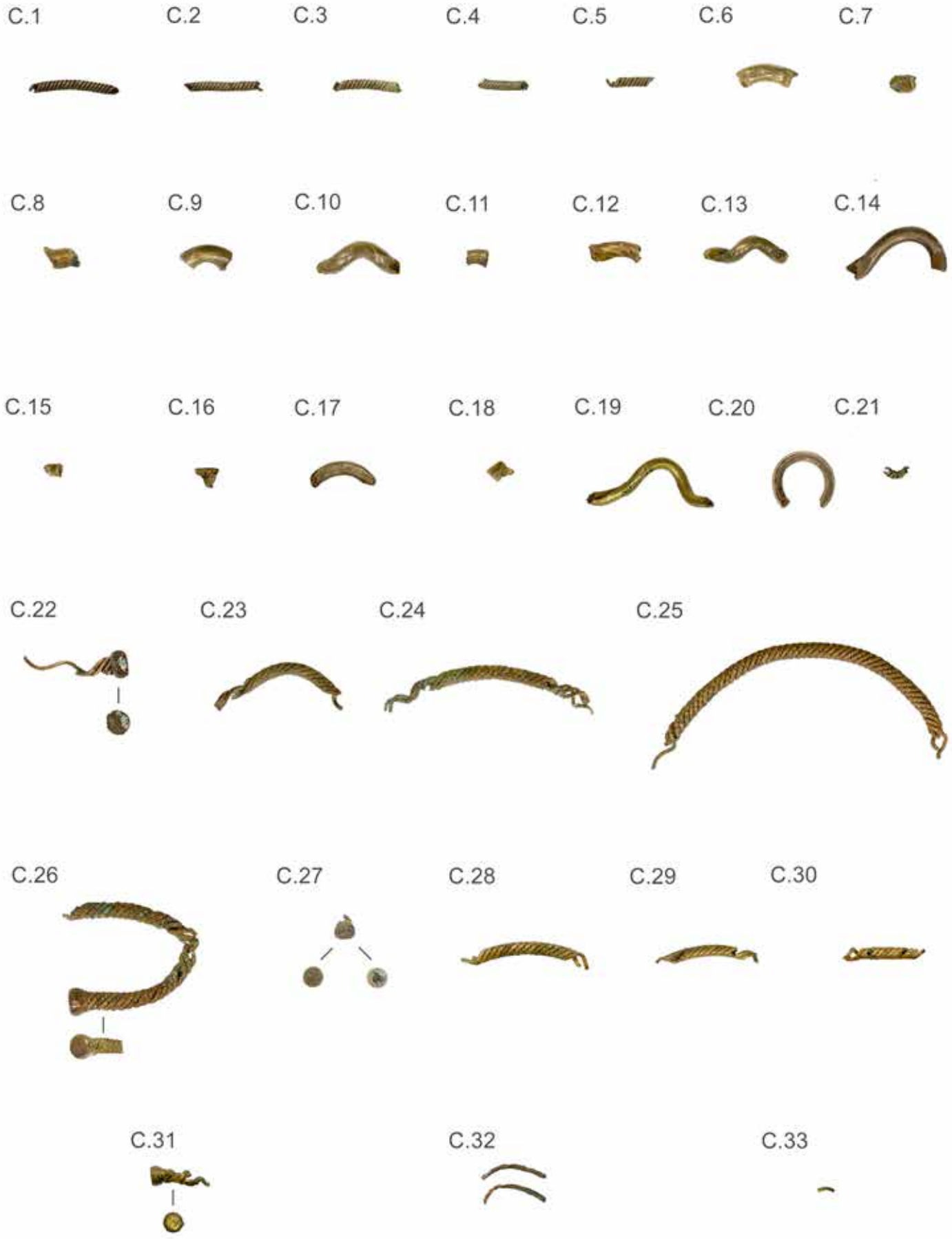

C.1
C.2
C.3
C.4
C.5
C.6
C.7
C.8
C.9
C.10
C.11
C.12
C.13
C.14
C.15
C.16
C.17
C.18
C.19
C.20
C.21
C.22
C.23
C.24
C.25
C.26
C.27
C.28
C.29
C.30
C.31
C.32
C.33
0
5
10cm

Plate 14.8

Wt: 1.2g; D(wire): 5.5mm; L: 8.3mm
C.16: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends, little survives.
Wt: 1.4g; D(wire): 5.0mm; L: 9.0mm; W: 7.2mm

C.17: Published reference: Clarke 1954, 58 (cake), no. 5; Hd. C No. 15
Curved length of wire, oval in cross-section at the ends, though hammered flat on the uncurved faces to give a squarish section. Cut at one end and slightly rounded at the other. Most likely from the loop terminal of a multi-strand torc.
Wt: 7.7g; D(wire): 5.0mm; L: 25.0mm

C.18: Published reference: Clarke 1954, 47, no. 9; pl. ix; Hd. C No. 12
Cut at both ends, little survives.
Wt: 1.1g; D(wire): 4.5mm; L: 10.5mm; W: 8.0mm

C.19: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.8)
MSCC: (?C/P)R
NCM: 1949.75.36
Published reference: Clarke 1954, 47, no. 11; pl. ix; Hd. C No. 14
Short length of circular-section gold/silver alloy wire, cut at both ends. The curvature suggests it was either part of a loop terminal, or originally part of a Stage II coiled or plied torc neck-ring or bracelet body.
Wt: 10.6g; D(wire): 4.3mm; L: 48.2mm

C.20: Gold/silver alloy torc/bracelet (Pl. 14.8)
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 11; pl. ix (this fragment not pictured); Hd. C No. 14
Curved length of circular-section gold/silver alloy wire, most likely part of the loop terminal from a multi-strand torc or bracelet. Cut at both ends.
Wt: 7.4g; D(wire): 3.8mm; D(term): 24.0mm

C.21: Gold/silver alloy torc/bracelet (Pl. 14.8)
MSCC: (??(4C))R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 12; Hd. C No. 16
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of four circular-section wires coiled together. The curvature suggests it was most likely originally part of a larger Stage III plied or coiled construction.
Wt: 0.6g; D(rope): 4.0mm; D(wire): 1.0mm; L: 10.0mm

C.22: Copper alloy torc/bracelet (Pl. 14.8)
MSCC: (7C)T
NCM: 1949.75
Published reference: Clarke 1954, 52, no. 1; pl. xi, right; Hd. C No. 17
[Analysed: see Ch. 18, and see Ch. 19 for identification of the wood]
Fragment of copper alloy multi-strand torc or bracelet, comprising one buffer terminal and a short length of neck-ring/body, unevenly broken at the other end. Stage II construction of seven strands of twisted square-section wire coiled together around a hollow core. The buffer terminal is plain, slightly expanding towards the flat front face.
Wt: 3.1g; D(nr): 7.0mm; D(wire): 0.8mm; D(term): 9.7mm; L: 39.4mm

C.23: Copper alloy torc/bracelet (Pl. 14.8)
MSCC: (6C)[3T,3R, alternating]
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 22; Hd. C No. 19
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, cut or broken at both ends. Stage II construction of six wires coiled together around a hollow core. Three are circular-section, three are twisted square-section wires, with the two types alternating.
Wt: 4.8g; D(nr): 5.0mm; D(wire): 1.5mm; L: 48.5mm

C.24: Copper alloy torc/bracelet (Pl. 14.8)
MSCC: (6C)T
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 22; Hd. C No. 19
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends, with the wires ending at different points. Stage II construction of six twisted square-section wires coiled together around a hollow core.
Wt: 6.6g; D(nr): 6.0mm; D(wire): 1.4mm; L: 79.0mm

C.25–7: Copper alloy torc/bracelet (Pl. 14.8)
MSCC: (5C)T
[Analysed: see Ch. 18]
Three fragments of copper alloy multi-strand buffer terminal torc/bracelet with Stage II construction of five strands of twisted square-section wire coiled together around a hollow core. The buffer terminals are plain, slightly expanding towards the flat front face.

C.25: NCM: 1949.75.12
Published reference: Clarke 1954, 52, no. 2; pl. xi, right; Hd. C No. 18
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends, with the wires ending at different points.
Wt: 17.2g; D(nr): 6.0mm; D(wire): 1.2mm; L: 112.5mm

C.26: NCM: 1949.75.54
Published reference: Clarke 1954, 52, no. 1; pl. xi, right; Hd. C No. 17
[Analysed: see Ch. 19 for identification of wood]
Fragment of copper alloy multi-strand torc or bracelet, comprising one buffer terminal and a short length of neck-ring/body, broken at the other end. The whole fragment has been bent into a rough U-shape, with significant damage to the neck-ring wires at the base of the 'U'.
Wt: 13.7g; D(nr): 6.0mm; D(wire): 1.2mm; D(term): 10.0mm; L: 51.0mm

C.27: NCM: 1949.75
[Analysed: see Ch. 19 for identification of wood]
Published reference: Clarke 1954, 52, no. 3 (left); pl. xi, right; Hd. C No. 20
Fragment of copper alloy multi-strand torc or bracelet, comprising one buffer terminal and a short length of neck-ring/body, unevenly broken at the other end.
Wt: 1.7g; D(nr): 6.2mm; D(wire): 1.0mm; D(term): 8.0mm; L: 8.8mm

C.28–30: Copper alloy torc/bracelet (Pl. 14.8)
MSCC: (5C)T
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 22; Hd. C No. 19
[Analysed: see Ch. 18]
Three fragments of copper alloy multi-strand torc neck-ring or bracelet body, each cut or broken at both ends, with the wires ending at different points. Stage II construction of five twisted square-section wires coiled together around a hollow core. Very pronounced wear on interior surfaces.

C.28: Wt: 3.0g; D(nr): 4.0mm; D(wire): 1.1mm; L: 45.0mm

C.29: Wt: 2.4g; D(nr): 4.0mm; D(wire): 1.1mm; L: 39.0mm

C.30: Wt: 1.9g; D(nr): 4.0mm; D(wire): 1.1mm; L: 31.0mm
Fragment shows traces of an organic core.

C.31: Copper alloy torc/bracelet (Pl. 14.8)
MSCC: (3P(2P))Q
NCM: 1949.75.53
Published reference: Clarke 1954, 52, no. 3 (right); pl. xi, right; Hd. C No. 20
[Analysed: see Ch. 18, and Ch. 19 for identification of wood]
Fragment of copper alloy multi-strand torc or bracelet, comprising one simple buffer terminal with flat face and convex edge, and short length of neck-ring/body, broken at the other end. Stage III construction of three ropes plied together, each formed from two square-section wires plied together.
Wt: 2.8g; D(nr): 6.0mm; D(rope): 3.0mm; D(wire): 1.0mm; D(term): 8.0mm; L: 23.0mm

C.32: Copper alloy wire/?torc/?bracelet (Pl. 14.8)
MSCC: (?C)T
NCM: 1949.75
Two fragments of twisted copper alloy wire, each broken at both ends. Possibly originally part of a Stage II coiled torc or bracelet.
Wt: 0.9g; D(wire): 1.8mm; L: 23.8mm (max.)

C.33: Copper alloy wire/?torc/?bracelet (Pl. 14.8)
MSCC: (?P/C)T
NCM: 1949.75
Short length of twisted square-section copper alloy wire, cut or broken at both ends. The curvature suggests it was originally part of a Stage II coiled or plied multi-strand torc or bracelet.
Wt: 0.1g; D(wire): 1.5mm; L: 6.5mm

C.34–6: Copper alloy torc/bracelet (Pl. 14.9)
MSCC: (?C)T
NCM: 1949.75
These groups each comprise short lengths of twisted square-section copper alloy wire, of similar diameter. Each fragment is broken at both ends and coiled in a way which suggests it originally formed part of a Stage II coiled multi-strand torc or bracelet. They have been grouped according to the tightness of the coil, where the fragments are long enough for this to be discerned, but some or all of these fragments could be from the same object.

C.34: Thirty-seven fragments, tightly coiled. Wt: 9.1g (total); D(nr): *c.* 6.0mm; D(wire): 1.3mm; L: 44.0mm (max.)
C.35: Seventy-eight fragments, loosely coiled. In one case, two adjoining strands from the coil remain.
Wt: 20.6g (total); D(nr): *c.* 4.0–6.5mm; D(wire): 1.3mm; L: 42.0mm (max.)

C.36: Sixty-four short fragments.
Wt: 5.6g (total); D(wire): 1.3mm; L: 10.0mm (max.)

C.37: Copper alloy wire/?torc/?bracelet (Pl. 14.9)
MSCC: (?C)T
NCM: 1949.75
Short fragment of twisted square-section copper alloy wire, broken at both ends. The curvature suggests it may have originally been part of a Stage II coiled or plied multi-strand torc or bracelet.
Wt: 0.2g; D(wire): 1.0mm; L: 9.5mm

C.38: Copper alloy wire/?torc/?bracelet (Pl. 14.9)
MSCC: (?P/C)Q
NCM: 1949.75
Short fragment of square-section copper alloy wire, cut or broken at both ends. The curvature suggests it may have originally been part of a Stage II coiled or plied multi-strand torc or bracelet. Some splitting/laminating of the wire.
Wt: 0.2g; D(wire): 1.8mm; L: 11.5mm

C.39: Copper alloy wire/?torc/?bracelet (Pl. 14.9)
NCM: 1949.75
Short fragment of square-section copper alloy wire, broken at both ends. Perhaps originally part of a multi-strand torc neck-ring or bracelet body.
Wt: 0.1g; D(wire): 0.8mm; L: 8.5mm

C.40: Copper alloy wire/?torc/?bracelet (Pl. 14.9)
MSCC: (?P/C)R
NCM: 1949.75
Five fragments of circular-section copper alloy wire, cut or broken at both ends. The loose curvature suggests they may have originally been part of a Stage II coiled or plied multi-strand torc or bracelet.
Wt: 0.9g; D(wire): 1.5mm; L: 15.0mm (max.)

C.41: Copper alloy wire/?torc/?bracelet (Pl. 14.9)
MSCC: (?P/C)R
NCM: 1949.75
Two fragments of circular-section copper alloy wire, cut or broken at both ends. The tight curvature suggests they were

originally part of a Stage II coiled or plied multi-strand torc or bracelet.
Wt: 0.3g; D(wire): 1.2mm; L: 7.0mm (max.)

C.42: Copper alloy wire/?torc/?bracelet (Pl. 14.9)
MSCC: (?P/C)R
NCM: 1949.75
Two fragments of circular-section copper alloy wire, each broken at both ends. The curvature suggests they may originally have part of a Stage II coiled or plied multi-strand torc or bracelet.
Wt: 0.3g; D(wire): 1.2mm; L: 10.0mm (max.)

C.43: Copper alloy torc/bracelet (Pl. 14.9)
MSCC: (?C)R
NCM: 1949.75
Twenty-three fragments of circular-section copper alloy wire, each cut or broken at both ends and loosely coiled in a way which suggests it originally formed part of a Stage II coiled torc or bracelet.
Wt: 7.3g; D(wire): 1.2mm; L: 35.3mm (max.)

C.44: Copper alloy wire/?torc/?bracelet (Pl. 14.9)
NCM: 1949.75
Short length of circular-section copper alloy wire, cut or broken at both ends. Possibly from a multi-strand torc or bracelet.
Wt: 0.5g; D(wire): 2.0mm; L: 20.0mm

C.45: Gold/silver alloy large ring (Pl. 14.10)
NCM: 1949.75.51
Published reference: Clarke 1954, 58 (cake), no. 4; pl. xiii, upper; Hd. C No. 2
[Analysed: see Appendix 5]
Gold/silver alloy large ring made from a thick bar with cross-section varying from squarish to rectangular. Coiled into a tight, flattened spiral. Broken into three pieces at the tight bends where the spiral has been crushed flat. One end tapered, one flat, cut end.
Wt: 58.1g; L: 58.0mm; W: 9.0mm; T: 4.5mm

C.46: Gold/silver alloy large ring (Pl. 14.10)
NCM: 1949.75.41
Published reference: Clarke 1954, 54, no. 1; Hd. C No. 3
[Analysed: see Appendix 5]
Complete gold/silver alloy large ring (joined from three fragments), made from a strip with rectangular cross-section. Overlapping ends, each blunt, but slightly tapered.
Wt: 22.7g; D(ext): 40.0mm; W: 6.8mm; T: 3.2mm

C.47: Gold/silver alloy small ring (Pl. 14.10)
NCM: 1949.75.6
Published reference: Clarke 1954, 56, no. 15; pl. xii; Hd. C No. 6
[Analysed: see Appendix 5]
Complete gold/silver alloy small spiral ring, made from a strip with rectangular cross-section. Around two complete turns. Blunt, slightly tapered ends.
Wt: 12.0g; D(ext): 19.5mm; W: 3.5mm; T: 1.8mm

C.48: Copper alloy small ring (Pl. 14.10)
NCM: 1949.75
Published reference: Clarke 1954, 55, no. 2; Hd. C No. 4
[Analysed: see Ch. 18]
Complete copper alloy small ring (joined from three fragments), made from a strip with rectangular cross-section. Overlapping, slightly tapered ends.
Wt: 11.6g; D(ext): 33.0mm; W: 7.0mm; T: 2.5mm

C.49: Copper alloy small ring (Pl. 14.10)
NCM: 1949.75
Published reference: Clarke 1954, 55, no. 3; Hd. C No. 5
[Analysed: see Ch. 18]
Complete copper alloy small ring with overlapping tapered terminals, made from a strip with rectangular cross-section.
Wt: 11.4g; D(ext): 30.0mm; W: 5.2mm; T: 3.0mm

C.50: Gold/silver alloy sheet (Pl. 14.10)
NCM: 1949.75
Published reference: Clarke 1954, 58 (cake), no. 3; pl. xiii, upper, 3; Hd. C No. 11
[Analysed: see Appendix 5]
Small fragment of gold/silver alloy sheet, folded and hammered. Possibly originally part of a tubular torc or sheet terminal component.
Wt: 0.7g; L: 11.4mm; T: 1.8mm (max.), sheet *c.* 0.3mm

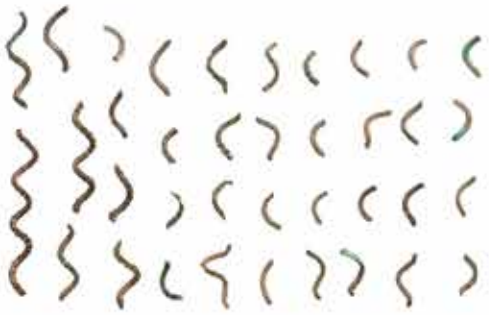
C.51: Copper alloy rivet head (Pl. 14.10)
NCM: 1949.75.57
Published reference: Clarke 1954, 57, no. 5; pl. xiii, lower; Hd. C No. 8
Hollow, circular, dome-shaped copper alloy rivet head or boss, with ragged outer edge. Made from thin sheet.
Wt: 0.9g; D(ext): 14.0mm

C.52: Copper alloy rivet head (Pl. 14.10)
NCM: 1949.75.58
Published reference: Clarke 1954, 57, no. 3; pl. xiii, lower; Hd. C No. 9
Hollow, circular, dome-shaped copper alloy rivet head with pierced central hole. Made from thin sheet.
Wt: 0.7g; D(ext): 12.0mm

C.53: Copper alloy rivet head (Pl. 14.10)
NCM: 1949.75.58
Published reference: Clarke 1954, 57, no. 3; pl. xiii, lower; Hd. C No. 9
Hollow, circular, dome-shaped copper alloy rivet head with raggedly broken outer edge. Made from thin sheet, with remains of circular-section shank protruding from centre on reverse.
Wt: 0.7g; D(ext): 10.0mm

C.54: Copper alloy binding strip/fitting (Pl. 14.10)
NCM: 1949.75.45
Published reference: Clarke 1954, 57, no. 2; pl. xiii, lower; Hd. C No. 7
[Analysed: see Ch. 18]
Arc of thin copper alloy U-shaped binding strip, or possibly section from the outer cover of an iron ring or fitting such as a bridle-bit side-link. Decorated on the exterior with two

C.34



C.35

C.36

C.37

C.38

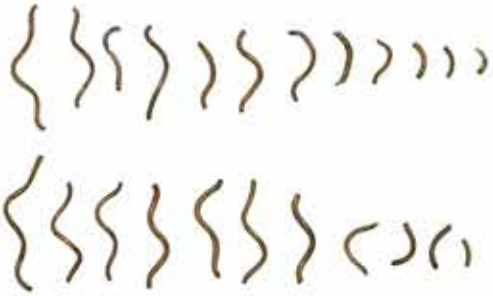
C.39

C.40

C.41

C.42

C.43



C.44

0 5 10cm

Plate 14.9

C.45

C.46

C.47

C.48

C.49

C.50

C.51

C.52

C.53

C.54

C.55

C.56

Plate 14.10

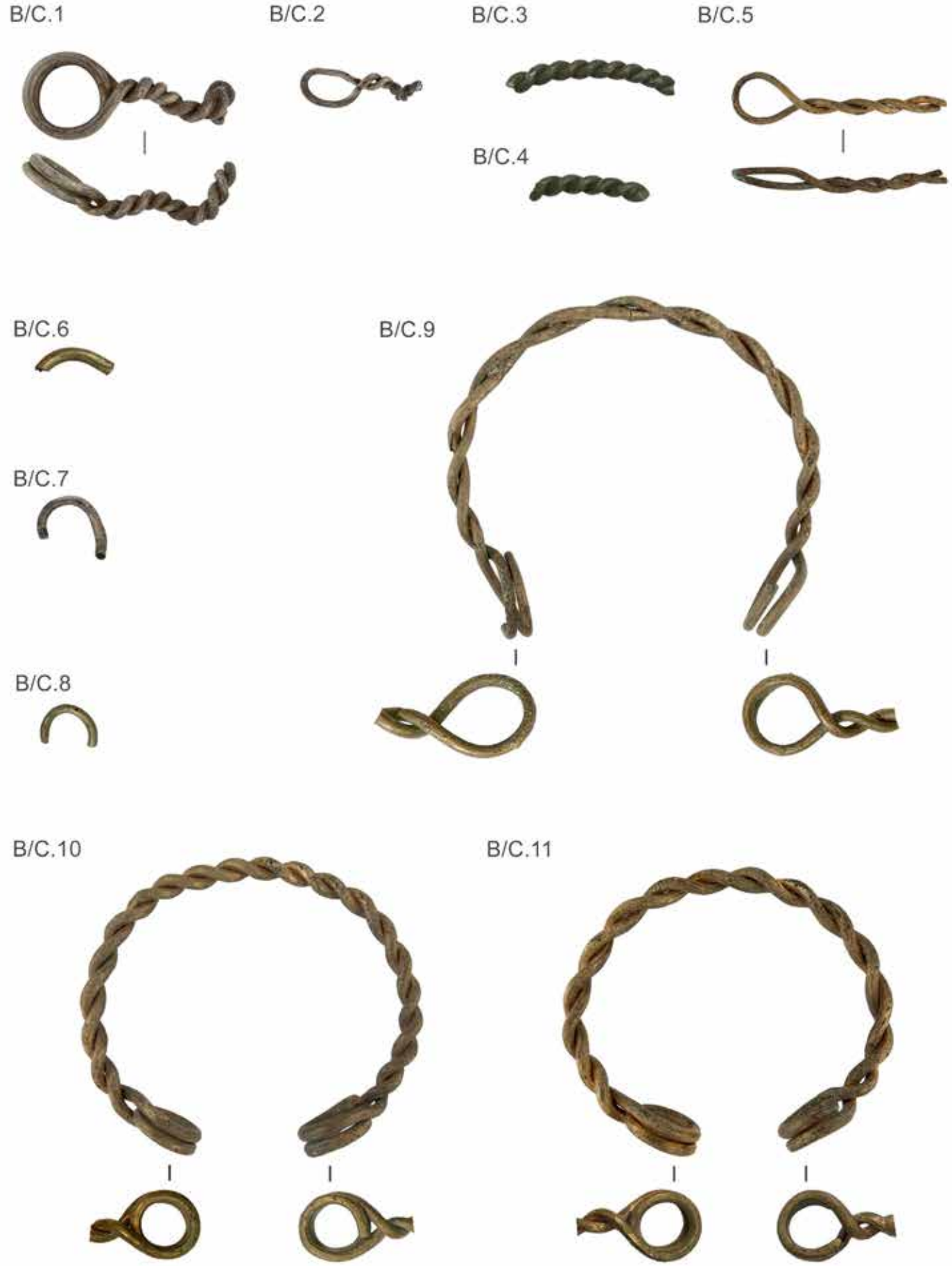


Plate 14.11

grooved lines down the centre, parallel to the curve of the arc.
Wt: 2.1g; L: 39.0mm; W: 8.0mm; T: 0.3mm

C.55: Copper alloy sheet (Pl. 14.10)
NCM: 1949.75
Published reference: Clarke 1954, 57, no. 6; Hd. C No. 10
Copper alloy sheet fragment with at least one curved original edge. Other edges probably broken.
Wt: 2.6g; L: 47.0mm; W: 14.8mm; T: 0.5mm

C.56: Copper alloy sheet (Pl. 14.10)
NCM: 1949.75
Published reference: Clarke 1954, 57, no. 6; Hd. C No. 10
Context details: Found during Clarke's excavations, Trench 20.
Two small copper alloy sheet fragments, each with one possible original straight edge.
Wt: 0.2g; L: 16.0mm (max.); T: 0.3mm

C.57–61: Five iron nails (likely post-medieval, see note in introduction to Hoard B catalogue)
Not pictured.
NCM: 1949.75
Published reference: Clarke 1954, 58 (Misc.), no. 4; fig. 9; Hd. C No. 1
Context details: Found during Clarke's excavations.
These nails were not seen at NCM; descriptions are based on a photocopy taken by Peter Northover in the 1980s (a copy of this image is held in the BM archive).

C.57-8: Iron nails with circular heads and rectangular-section shanks.
C.59-61: Iron nails with rectangular-section shanks.

Hoard B/C

Found in 1948. Material from Hoards B and C which became intermixed shortly after discovery and cannot be securely assigned to either hoard (see Ch. 4 and introduction to Hoard B catalogue).

B/C.1: Gold/silver alloy torc/bracelet (Pl. 14.11)
MSCC: (?2P(2P))R
NCM: 1949.75.49
Published reference: Clarke 1954, 47, no. 16; pl. ix; Hd. B/C No. 26
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising a double-loop terminal and a short length of neck-ring/body, cut at the other end. What remains of the neck-ring/body is a Stage II component formed from two circular-section wires plied tightly together. The wires are twisted in such a way as to suggest that they are more likely to have been part of a larger Stage III construction, perhaps a triple-loop terminal with (2P(2P))R neck-ring.
Wt: 38.2g; D(rope): 7.5mm; D(wire): 3.0mm; D(term): 27.2mm; L: 80.0mm

B/C.2: Gold/silver alloy torc/bracelet (Pl. 14.11)
MSCC: (?2P(2P))R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 18; pl. ix; Hd. B/C No. 28
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising a single-loop terminal and a short length of neck-ring/body, cut or broken at the other end. What remains of the neck-ring/body is a Stage II component formed from two circular-section wires plied together. The wires are twisted in such a way as to suggest that they are more likely to have been part of a larger Stage III construction, perhaps a double- or triple-loop terminal with (2P(2P))R neck-ring.
Wt: 6.3g; D(nr): *c.* 10.0mm; D(rope): 4.5mm; D(wire): 2.3mm; D(term): 24.0mm; L: 46.0mm

B/C.3–4: Gold/silver alloy torc/bracelet (Pl. 14.11)
MSCC: (2P)R
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 47; pl. ix; Hd. B/C No. 53
[Analysed: see Appendix 5]

B/C.3 and B/C.4 are two joining fragments of the same gold/silver alloy torc neck-ring or bracelet body, with Stage II construction of two circular-section wires plied together.
B/C.3: Broken at both ends.
Wt: 17.0g; D(nr): 7.0mm; D(wire): 3.2mm; L: 60.0mm
B/C.4: Cut at one end and broken at the other (where it joins B/C.3).
Wt: 11.2g; D(nr): 7.0mm; D(wire): 3.2mm; L: 45.0mm

B/C.5: Gold/silver alloy torc/bracelet (Pl. 14.11)
MSCC: (2PZ)Q
NCM: 1949.75.29
Published reference: Clarke 1954, 48, no. 44; pl. ix; Hd. B/C No. 50
[Analysed: see Appendix 5]
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one single-loop terminal and a length of neck-ring/body, cut or broken at the other end. Stage II construction of two square-section wires plied together Z-twist. The wires are circular-section in the area of the terminal.
Wt: 9.9g; D(nr): 6.0mm; D(wire): 2.0mm; D(term): 20.0mm; L: 81.0mm

B/C.6: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.11)
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 17; pl. ix; Hd. B/C No. 27
[Analysed: see Appendix 5]
Curved fragment of circular cross-section gold/silver alloy wire, most likely from a multi-strand torc or bracelet. Cut at one end, original flat end at the other. Perhaps part of a loop terminal.
Wt: 6.2g; D(wire): 5.0mm; L: 30.0mm

B/C.7–8: Gold/silver alloy torc/bracelet (Pl. 14.11)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 36; pl. ix; Hd. B/C

B/C.12
B/C.13
B/C.14
B/C.15
B/C.16
B/C.17
B/C.18
B/C.19
B/C.20
B/C.21
B/C.22
B/C23
B/C.24
B/C.25
B/C.26
B/C.27
0
5
10cm

Plate 14.12

No. 42
[Analysed: see Appendix 5]

B/C.7–8 are two joining fragments of the same loop terminal from a gold/silver alloy multi-strand torc or bracelet, and they are shown together in Clarke (1954). Each is a curved fragment of circular-section wire.

B/C.7: Broken both ends.
Wt: 5.4g; D(wire): 4.0mm; L: 30.0mm

B/C.8: Broken at one end, and flat at the other.
Wt: 3.6g; D(wire): 4.0mm; L: 22.0mm

B/C.9: Copper alloy torc (Pl. 14.11)
MSCC: (2PZ)R
NCM: 1949.75.9
Published reference: Clarke 1954, 48, no. 33; pl. viii; Hd. B/C No. 39

[Analysed: see Ch. 18]
Complete copper alloy multi-strand torc with double-loop terminals. Stage II neck-ring formed from two circular-section wires plied together Z-twist. Each open-loop terminal is formed from the ends of the two separate neck-ring wires, with each wire ending in a hook at each end.
Wt: 117.8g; D(ext): 144.5mm; D(nr): 8.8mm; D(wire): 4.0mm; D(term): 31.5mm

B/C.10: Copper alloy torc (Pl. 14.11)
MSCC: (2PZ)R
NCM: 1949.75.3
Published reference: Clarke 1954, 47, no. 31; pl. viii; Hd. B/C No. 37
[Analysed: see Ch. 18]
Complete copper alloy multi-strand torc with double-loop terminals and a Stage II neck-ring formed from two circular-section wires plied together Z-twist. One terminal is continuous with the neck-ring wires, while at the other each loop is open.
Wt: 130.6g; D(ext): 128.8mm; D(nr): 9.5mm; D(wire): 5.0mm; D(term): 26.5mm

B/C.11: Copper alloy torc (Pl. 14.11)
MSCC: (2PZ)F
NCM: 1949.75.7
Published reference: Clarke 1954, 48, no. 32; pl. viii; Hd. B/C No. 38
[Analysed: see Ch. 18]
Complete copper alloy multi-strand torc with double-loop terminals and a Stage II neck-ring formed from two slightly faceted wires plied together Z-twist. One terminal is continuous with the neck-ring wires, while at the other each loop is open.
Wt: 128.7g; D(ext): 124.5mm; D(nr): 9.5mm; D(wire): 5.0mm; D(term): 27.5mm

B/C.12: Copper alloy bracelet (Pl. 14.12)
MSCC: (2PZ)F
NCM: 1949.75.4
Published reference: Clarke 1954, 47, no. 30; pl. viii; Hd. B/C No. 36
[Analysed: see Ch. 18]
Complete copper alloy multi-strand bracelet with double-loop terminals and a Stage II neck-ring formed from two slightly faceted wires plied together Z-twist. One terminal is continuous with the neck-ring wires, while at the other each loop is open.
Wt: 50.4g; D(ext): 82.0mm; D(nr): 7.0mm; D(wire): 3.2mm; D(term): 23.0mm

B/C.13: Copper alloy torc/bracelet (Pl. 14.12)
MSCC: (2P)Q
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 41; pl. ix; Hd. B/C No. 47
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc or bracelet, comprising one continuous double-loop terminal and a length of neck-ring/body, cut at the other end. The Stage II neck-ring is formed from two square-section wires plied together.
Wt: 10.2g; D(nr): 5.0mm; D(wire): 2.0mm; D(term): 25.0mm; L: 59.0mm

B/C.14–15: Copper alloy torc/bracelet (Pl. 14.12)
MSCC: (2PZ)Q
NCM: 1949.75
[Analysed: see Ch. 18]

B/C.14–15 are most likely from the same copper alloy multi-strand torc or bracelet, with Stage II neck-ring/body formed from two square-section wires plied together Z-twist.

B/C.14: Published reference: Clarke 1954, 48, no. 45; pl. ix; Hd. B/C No. 51
Fragment comprising one continuous single-loop terminal and a short length of neck-ring/body, cut at the other end.
Wt: 11.8g; D(nr): 7.0mm; D(wire): 2.8mm; D(term): 21.5mm; L: 58.0mm

B/C.15: Published reference: Clarke 1954, 48, no. 48; pl. ix; Hd. B/C No. 54
Fragment of torc neck-ring or bracelet body, cut at both ends.
Wt: 8.6g; D(nr): 7.0mm; D(wire): 2.8mm; L: 59.0mm

B/C.16: Copper alloy torc/bracelet (Pl. 14.12)
NCM: 1949.75.20
Published reference: Clarke 1954, 48, no. 38; pl. ix; Hd. B/C No. 44
[Analysed: see Ch. 18]
Copper alloy loop terminal fragment from multi-strand torc or bracelet. What remains is a single-loop of circular-section wire, broken at both ends. Probably originally part of at least a double-loop terminal.
Wt: 16.4g; D(ext): 35.0mm; D(wire): 5.0mm

B/C.17: Copper alloy wire/?torc/?bracelet (Pl. 14.12)
MSCC: (?2P)R
NCM: 1949.75

Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Short length of copper alloy circular-section wire, broken at one end, cut at the other. Curved in a way which suggests it originally formed part of a Stage II construction in a multi-strand torc or bracelet, most likely two such wires plied together.
Wt: 11.7g; D(wire): 5.8mm; L: 45.0mm

B/C.18: Copper alloy wire/?torc/?bracelet (Pl. 14.12)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Curved fragment of circular cross-section copper alloy wire, cut at one end and rounded at the other. Most likely from the loop terminal of a multi-strand torc or bracelet.
Wt: 6.3g; D(wire): 5.5mm; L: 29.0mm

B/C.19– 22: Copper alloy torc/bracelet (Pl. 14.12)
[Analysed: see Ch. 18]
B/C.19–22 are copper alloy wire fragments of similar diameter which could represent parts of the same loop-terminal multi-strand torc or bracelet.

B/C.19: NCM: 1949.75
Published reference: Clarke 1954, 48, no. 35; pl. ix; Hd. B/C No. 41
Part of a double-loop terminal, made from wire with a circular cross-section. Cut or broken at both ends. Wt: 20.3g; D(wire): 4.5mm; D(term): 31.0mm; L: 39.5mm

B/C.20: NCM: 1949.75
Published reference: Clarke 1954, 48, no. 39; pl. ix; Hd. B/C No. 45
Curved fragment of circular cross-section copper alloy wire, broken at both ends. Perhaps part of a loop terminal.
Wt: 11.2g; D(wire): 4.5mm; L: 43.0mm

B/C.21: NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix (top left, mis-labelled in the plate as no. 42); Hd. B/C No. 46
Bent and curved fragment of circular cross-section copper alloy wire, perhaps part of a loop terminal and start of the neck-ring/body. Broken at one end and flat at the curved end which may form the terminal.
Wt: 19.2g; D(wire): 4.5mm; L: 95.0mm

B/C.22: NCM: 1949.75.20
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
Distorted coil of circular-section copper alloy wire which may represent a damaged double-loop terminal. The wire extends as a single strand into what would have been the beginning of the neck-ring/body and is cut at the end.
Wt: 16.7g; D(wire): 4.5mm; L: 78.0mm

B/C.23: Copper alloy torc/bracelet (Pl. 14.12)
MSCC: (2P)R
NCM: 1949.75.47
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, cut or broken at both ends. Stage II construction of two circular-section wires plied together.
Wt: 11.5g; D(nr): 7.0mm; D(wire): 4.4mm; L: 38.0mm

B/C.24: Copper alloy torc/bracelet (Pl. 14.12)
MSCC: (2PZ)Q
NCM: 1949.75.27
Published reference: Clarke 1954, 48, no. 43; pl. viii; Hd. B/C No. 49
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc or bracelet, comprising one single-loop terminal and a length of neck-ring/body, cut or broken at the other end, with one wire extending slightly further than the other. Stage II construction of two square-section wires plied together Z-twist. The terminal is an open loop, formed from the ends of the neck-ring wires, which abut at the very end of the terminal.
Wt: 55.5g; D(nr): 8.0mm; D(wire): 4.0mm; D(term): 30.5mm; L: 108.0mm

B/C.25: Copper alloy torc/bracelet (Pl. 14.12)
NCM: 1949.75.25
Published reference: Clarke 1954, 48, no. 37; pl. ix; Hd. B/C No. 43
[Analysed: see Ch. 18]
Part of a double-loop terminal from a multi-strand copper alloy torc or bracelet, made from wire with a circular cross-section. The wire extends as a single strand to form the beginning of the neck-ring, cut at the end.
Wt: 15.7g; D(wire): 4.0mm; D(term): 7.8mm; L: 59.0mm

B/C.26–31: Copper alloy torc/bracelet (Pls 14.12–14.13)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
B/C.26–30 are all curved fragments of circular-section copper alloy wire, and may be part of the same multi-strand torc or bracelet; B/C.31 (and B/C.32–4) may also be part of the same object. B/C.26 is likely part of a loop terminal, while the other fragments are from the neck-ring/body.

B/C.26: Most likely part of a loop terminal. Broken at both ends.
Wt: 6.0g; D(wire): 3.8mm; D(term): 27.2mm; L: 27.0mm

B/C.27: Broken at both ends.
Wt: 3.7g; D(wire): 3.8mm; L: 27.5mm

B/C.28: Broken at both ends.
Wt: 3.5g; D(wire): 4.0mm; L: 23.8mm

B/C.29: Broken at both ends.
Wt: 4.0g; D(wire): 4.0mm; L: 18.6mm

B/C.30: Broken at one end and possibly cut at the other.
Wt: 2.2g; D(wire): 3.9mm; L: 18.8mm

B/C.31: Broken at both ends.
Wt: 14.3g; D(wire): 3.9mm; L: 98.0mm

B/C.32: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Curved fragment of circular cross-section copper alloy wire, perhaps part of a multi-strand torc or bracelet. Broken at one end and cut at the other.
Wt: 6.2g; D(wire): 4.0mm; L: 53.0mm

B/C.33: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Curved fragment of circular cross-section copper alloy wire, perhaps part of a multi-strand torc or bracelet. Broken at both ends.
Wt: 2.2g; D(wire): 4.0mm; L: 26.8mm

B/C.34: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Curved fragment of circular cross-section copper alloy wire, perhaps part of a multi-strand torc or bracelet. Broken at both ends.
Wt: 1.9g; D(wire): 3.7mm; L: 20.0mm

B/C.35: Copper alloy torc/bracelet (Pl. 14.13)
MSCC: (2PZ)R
NCM: 1949.75.28
Published reference: Clarke 1954, 48, no. 42; pl. ix; Hd. B/C No. 48
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc or bracelet, comprising one double-loop terminal and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied together Z-twist.
Wt: 20.1g; D(nr): 6.0mm; D(wire): 3.0mm; D(term): 20.0mm; L: 90.0mm

B/C.36: Copper alloy torc/bracelet (Pl. 14.13)
MSCC: (2PZ)F
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 46; pl. ix; Hd. B/C No. 52
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc or bracelet, comprising one single-loop terminal and a short length of neck-ring/body, cut or broken at the other end. Stage II construction of two faceted wires plied together Z-twist.
Wt: 10.7g; D(nr): 9.0mm; D(wire): 3.0mm; D(term): 20.5mm; L: 46.0mm

B/C.37: Copper alloy torc/bracelet (Pl. 14.13)
NCM: 1949.75.22
Published reference: Clarke 1954, 48, no. 34; pl. ix; Hd. B/C No. 40
[Analysed: see Ch. 18]
Fragment of copper alloy circular-section wire formed into a ring, most likely the loop terminal from a multi-strand torc or bracelet.
Wt: 10.6g; D(ext): 41.0mm; D(wire): 3.3mm

B/C.38: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Curved fragment of circular cross-section copper alloy wire, perhaps part of a multi-strand torc or bracelet. Broken at both ends.
Wt: 2.7g; D(wire): 3.0mm; L: 42.5mm

B/C.39: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Curved fragment of circular cross-section copper alloy wire, perhaps part of a multi-strand torc or bracelet. Broken at both ends.
Wt: 2.0g; D(wire): 3.2mm; L: 23.8mm

B/C.40: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
NCM: 1949.75
Published reference: Clarke 1954, 48, no. 40; pl. ix; Hd. B/C No. 46
[Analysed: see Ch. 18]
Curved fragment of circular cross-section copper alloy wire, perhaps part of a multi-strand torc or bracelet. Bent into a U-shape and cut at both ends.
Wt: 2.1g; D(wire): 3.0mm; L: 16.5mm

B/C.41: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
MSCC: (?C)T
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 29; pl. ix, upper right; Hd. B/C No. 35
[Analysed: see Ch. 18]
Nine fragments of twisted square-section copper alloy wire, probably from a multi-strand torc or bracelet, broken at both ends. The curvature suggests they were originally part of a Stage II coiled construction.
Wt: 19.3g (total); D(wire): 2.5mm; L: 82.0mm (max.)

B/C.28
B/C.29
B/C.30
B/C.31
B/C.32
B/C.33
B/C.34
B/C.35
B/C.36
B/C.37
B/C.38
B/C.39
B/C.40
B/C.41
B/C.42
B/C.43
B/C.44
B/C.45
B/C.46
B/C.47
B/C.48
B/C.49
0
5
10cm

Plate 14.13

B/C.42–3: Copper alloy torc/bracelet (Pl. 14.13)
MSCC: (3PZ)R
Published reference: Clarke 1954, 47, no. 26; Hd. B/C No. 32
[Analysed: see Ch. 18]
B/C.42–3 are most likely from the same object. Each is a fragment of copper alloy multi-strand torc neck-ring or bracelet body, with Stage II construction of three circular-section wires plied together Z-twist.

B/C.42: NCM: 1949.75.37
Cut at both ends.
Wt: 5.4g; D(nr): 4.0mm; D(wire): 2.0mm; L: 55.2mm

B/C.43: NCM: 1949.75
Cut or broken at both ends.
Wt: 2.3g; D(nr): 3.0mm; D(wire): 1.8mm; L: 34.0mm

B/C.44–5: Copper alloy torc/bracelet (Pl. 14.13)
MSCC: (3P)R
Published reference: Clarke 1954, 47, no. 26; Hd. B/C No. 32
[Analysed: see Ch. 18]
B/C.44–5 are most likely from the same object. Each is a fragment of copper alloy multi-strand torc neck-ring or bracelet body, with Stage II construction of three circular-section wires plied together.

B/C.44: NCM: 1949.75.37
Cut at both ends.
Wt: 4.1g; D(nr): 4.0mm; D(wire): 1.8mm; L: 51.5mm

B/C.45: NCM: 1949.75
Cut or broken at both ends.
Wt: 2.0g; D(nr): 3.0mm; D(wire): 1.7mm; L: 34.0mm

B/C.46: Copper alloy wire/?torc/?bracelet (Pl. 14.13)
MSCC: (?P/C)R
NCM: 1949.75
Short lengths of circular-section copper alloy wire from a multi-strand torc or bracelet, each cut or broken at both ends. The curvature suggests they were originally part of a Stage II coiled or plied construction.
Wt: 5.4g (total); D(wire): 2.0mm; L: 37.0mm (max.)

B/C.47–9: Copper alloy small torc (Pl. 14.13)
MSCC: (2P(2P))R
[Analysed: see Ch. 18]
B/C.47–8 are part of the same copper alloy small multi-strand torc, with Stage III construction of two ropes plied together, each comprising two circular-section wires plied together. B/C.49 may be part of the same or a very similar object.

B/C.47: NCM: 1949.75.11
Published reference: Clarke 1954, 47, no. 23; pl. viii; pl. ix; Hd. B/C No. 29
Fragment comprising one double thickened/merged ring terminal and a short length of neck-ring, broken at the other end.
Wt: 29.2g; D(ext): 102.0mm; D(nr): 6.2mm; D(rope): 3.2mm; D(wire): 1.4mm; D(term): 15.8mm;

B/C.48: NCM: 1949.75.11
Published reference: Clarke 1954, 47, no. 23; pl. viii; pl. ix; Hd. B/C No. 29
Fragment comprising a double thickened/merged ring terminal and a short length of neck-ring, cut or broken at the other end.
Wt: 6.5g; D(nr): 5.0mm; D(rope): 3.0mm; D(wire): 1.4mm; D(term): 17.0mm; L: 50.0mm

B/C.49: NCM: 1949.75
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
Fragment of torc neck-ring, cut or broken at each end.
Wt: 8.4g; D(nr): 5.5mm; D(rope): 3.1mm; D(wire): 1.4mm; L: 67.0mm

B/C.50–3: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (2P(2P))R
[Analysed: see Ch. 18]
B/C.50–53 may be from the same copper alloy multi-strand torc or bracelet, with loop terminals and Stage III construction of two ropes plied tightly together, each comprising two circular-section wires plied tightly together.

B/C.50: NCM: 1949.75.14
Published reference: Clarke 1954, 47, no. 24; pl. viii; Hd. B/C No. 30
Fragment comprising the crushed remains of a broken, double-loop terminal and most of the neck-ring/body, cut or broken at the other end.
Wt: 32.0g; D(ext): 99.0mm; D(nr): 5.0mm; D(rope): 2.8mm; D(wire): 1.3mm

B/C.51: NCM: 1949.75
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
Fragment comprising a broken loop terminal and part of the neck-ring/body, cut or broken at the other end. Only one complete loop of the terminal remains, but it appears that part of a second loop may have been broken and bent away from the first.
Wt: 6.1g; D(nr): 5.0mm; D(rope): 2.0mm; D(wire): 1.2mm; D(term): 13.5mm; L: 58.0mm

B/C.52: NCM: 1949.75.31
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
Seventeen fragments of worn copper alloy Stage III multi-strand torc neck-ring or bracelet body, all broken at both ends. Seven are Stage III components, on the other ten fragments only a Stage II element of the Stage III construction remains.
Wt: 23.5g (total); D(nr): 5.0mm; D(rope): 2.3mm; D(wire): 1.3mm; L: 55.0mm (max.)

B/C.53: NCM: 1949.75
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
Three fragments of copper alloy multi-strand torc neck-ring or bracelet body, each cut or broken at each end. What remains are Stage II components, formed from two circular-section wires plied together. The fragments are curved in a way which suggests they originally formed part of a larger Stage III construction.

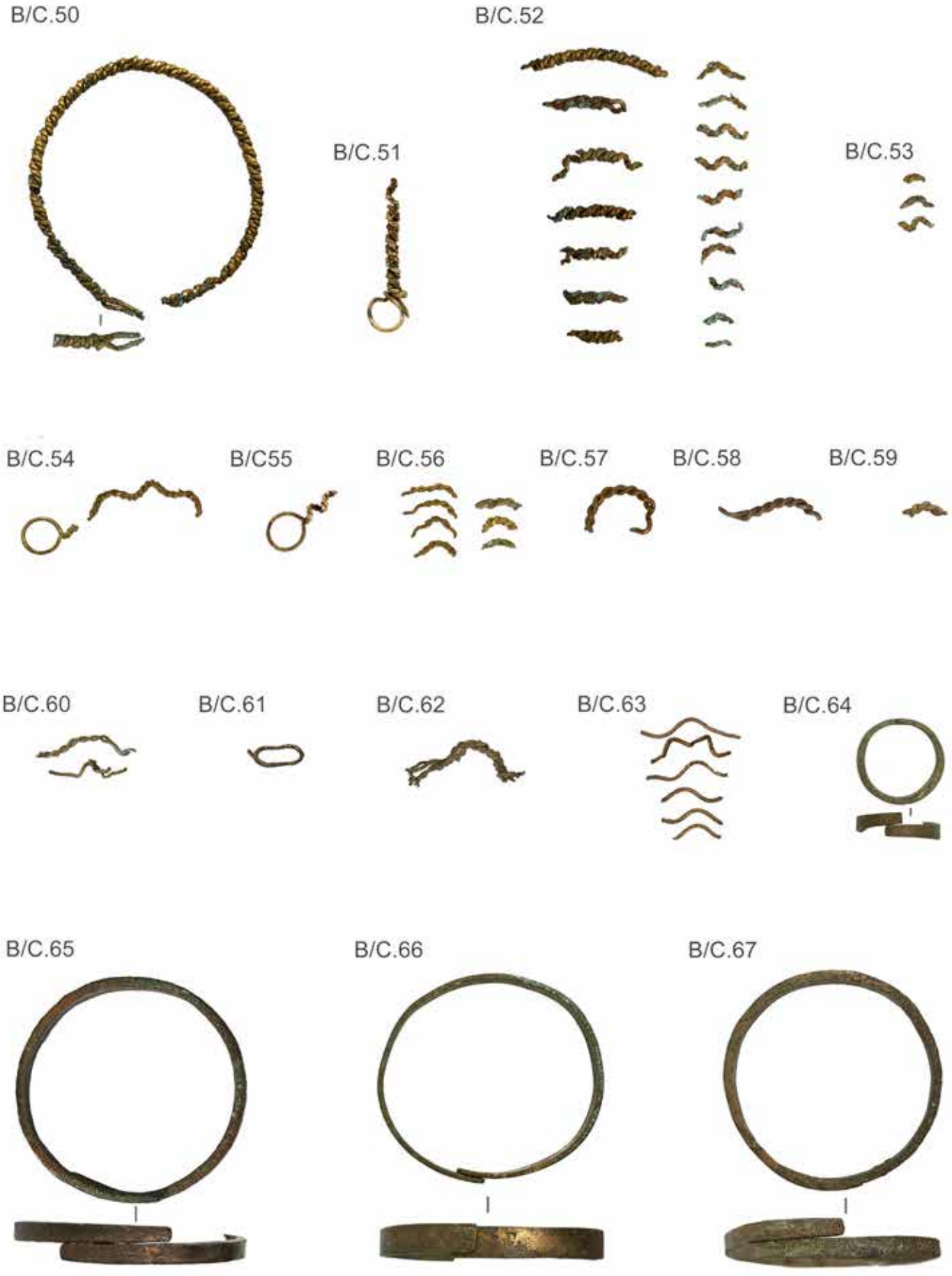

B/C.50
B/C.52
B/C.51
B/C.53
B/C.54
B/C55
B/C.56
B/C.57
B/C.58
B/C.59
B/C.60
B/C.61
B/C.62
B/C.63
B/C.64
B/C.65
B/C.66
B/C.67
0
5
10cm

Plate 14.14

Wt: 1.1g (total); D(rope): 1.9mm; D(wire): 1.1mm; L: 13.0mm (max.)

B/C.54–5: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (?3C(2P))R
Published reference: Clarke 1954, 47, no. 27; pl. ix, lower left (erroneously labelled as 'no. 29'); Hd. B/C No. 33
[Analysed: see Ch. 18]
B/C.54–5 are joining fragments of the same copper alloy multi-strand torc or bracelet with loop terminals. The two terminal fragments are shown joined in Clarke (1954). All that remains of the neck-ring/body is a Stage II component, comprising two circular-section wires plied together. The form suggests that the original construction was Stage III, formed from at least three such ropes coiled together.

B/C.54: NCM: 1949.75.12
Fragment comprising one half of a double-loop terminal with a short length of neck-ring/body, broken at the other end, and an additional (joining) fragment of neck-ring/body.
Wt: 3.1g; D(rope): 2.5mm; D(wire): 1.3mm; D(term): 12.0mm; L: 22.0mm, 43.0mm

B/C.55: NCM: 1949.75
Fragment comprising one half of a double-loop terminal with a short length of neck-ring/body, broken at the other end.
Wt: 1.5g; D(nr): 5.5mm; D(rope): 2.0mm; D(wire): 1.0mm; D(term): 14.0mm; L: 32.0mm

B/C.56: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (?C(2P))R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
[Analysed: see Ch. 18]
Seven fragments of copper alloy multi-strand torc neck-ring or bracelet body, cut or broken at each end. What remains are Stage II components, formed from two circular-section wires plied together. The fragments are curved in a way which suggests they originally formed part of a larger Stage III coiled construction.
Wt: 3.1g (total); D(rope): 2.3mm; D(wire): 1.0mm; L: 21.0mm (max.)

B/C.57: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (2P)R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 28; Hd. B/C No. 34
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, cut at both ends, with one wire extending further than the others. Stage II construction of two circular-section wires plied together. The whole fragment has been bent into a rough U-shape.
Wt: 2.7g; D(nr): 4.0mm; D(wire): 1.5mm; L: 28.0mm

B/C.58: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (?P(2P))R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 28; Hd. B/C No. 34
[Analysed: see Ch. 18]
Fragment of multi-strand copper alloy torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. This rope is curved and may originally have formed part of a Stage III plied construction.
Wt: 2.0g; D(rope): 3.5mm; D(wire): 1.5mm; L: 38.8mm

B/C.59: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (?C([1+1x2P]P))R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 28; Hd. B/C No. 34
[Analysed: see Ch. 18]
Fragment of multi-strand copper alloy torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II/III component of two elements plied together. One is a circular-section wire, while the other is itself a Stage II component, formed from two narrow circular-section wires plied together. The whole fragment is curved and may originally have formed part of a more complex construction. The Stage II rope that forms one of the plies is most likely a joining section between two wires, since mixed-stage plies are not otherwise attested in the Snettisham assemblage or other Iron Age torcs.
Wt: 0.8g; D(rope): 3.0mm (whole rope); D(wire): 1.5mm (for single wire and the (2P)R ply); L: 17.0mm

B/C.60: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (?C(2P))R
NCM: 1949.75.24
[Analysed: see Ch. 18]
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
Two fragments of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains are Stage II components of two circular-section wires plied together. These ropes are curved in a way which suggests they originally formed part of a Stage III coiled construction. Possibly deliberately untwisted.
Wt: 1.6g (total); D(rope): 2.8mm; D(wire): 1.0mm; L: 37.5mm (max.)

B/C.61: Copper alloy wire/?torc/?bracelet (Pl. 14.14)
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
[Analysed: see Ch. 18]
Fragment of copper alloy circular-section wire bent into an oval loop, possibly a squashed loop terminal from a multi-strand torc or bracelet.
Wt: 0.9g; D(wire): 1.3mm; L: 21.5mm; W: 7.0mm

B/C.62: Copper alloy torc/bracelet (Pl. 14.14)
MSCC: (?C(3P(2P)))R
NCM: 1949.75
Published reference: Clarke 1954, 47, no. 25; Hd. B/C No. 31
[Analysed: see Ch. 18]
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, cut or broken at both ends. What remains is a Stage III component formed from three ropes plied together,

B/C.68
B/C.69
B/C.70
B/C.71
B/C.72
B/C.73
B/C.74
B/C.75
B/C.76
B/C.77
B/C.78
B/C.79
B/C.80
B/C.81
B/C.82
B/C.83
B/C.84
B/C.85
0
5
10cm

Plate 14.15

each of which consists of two circular-section wires plied together. The whole fragment is curved in a way which suggests that it may have originally formed part of a Stage IV construction. The wires have been partially untwisted at one end.
Wt: 3.6g; D(cable): 5.6mm; D(rope): 2.5mm; D(wire): 1.0mm; L: 45.0mm

B/C.63: Copper alloy wire/?torc/?bracelet (Pl. 14.14)
MSCC: (?C)T
NCM: 1949.75
Six fragments of copper alloy twisted wire, broken at both ends. Each is curved in a way which suggests it was originally part of a coiled construction in a multi-strand torc or bracelet.
Wt: 3.0g; D(wire): 1.3mm; L: 37.5mm (max.)

B/C.64: Gold/silver alloy small ring (Pl. 14.14)
NCM: 1949.75
Published reference: Clarke 1954, 55, no. 4; Hd. B/C No. 10 (rendered as Hd. C No. 10 in Clarke 1954, in error)
[Analysed: see Appendix 5]
Complete gold/silver alloy small ring with overlapping terminals, made from a strip with rectangular cross-section. Flat, slightly tapered ends.
Wt: 13.8g; D(ext): 33.0mm; W: 7.2mm; T: 2.8mm

B/C.65: Copper alloy large ring (Pl. 14.14)
NCM: 1949.75.23
Published reference: Clarke 1954, 54, no. 2; fig. 7; Hd. B/C No. 1
[Analysed: see Ch. 18]
Complete copper alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. Blunt, slightly rounded ends.
Wt: 54.8g; D(ext): 86.0mm; W: 3.8mm; T: 6.5mm

B/C.66: Copper alloy large ring (Pl. 14.14)
NCM: 1949.75.17
Published reference: Clarke 1954, 54, no. 4; fig. 7; Hd. B/C No. 3
[Analysed: see Ch. 18]
Complete copper alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. Blunt, slightly rounded ends.
Wt: 53.0g; D(ext): 85.0mm; W: 11.2mm; T: 2.0mm

B/C.67: Copper alloy large ring (Pl. 14.14)
NCM: 1949.75.21
Published reference: Clarke 1954, 54, no. 3; Hd. B/C No. 2
[Analysed: see Ch. 18]
Complete copper alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. Flat, slightly tapered ends.
Wt: 54.8g; D(ext): 82.0mm; W: 7.0mm; T: 4.0mm

B/C.68: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75.10
Published reference: Clarke 1954, 54, no. 5; fig. 7; Hd. B/C No. 4
[Analysed: see Ch. 18]
Complete copper alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. Slightly rounded, tapered ends.
Wt: 53.6g; D(ext): 64.5mm; W: 9.5mm; T: 3.5mm

B/C.69: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75.19
Published reference: Clarke 1954, 54, no. 6; Hd. B/C No. 5
[Analysed: see Ch. 18]
Complete copper alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. Flat, slightly tapered terminals.
Wt: 43.5g; D(ext): 59.0mm; W: 7.6mm; T: 4.0mm

B/C.70: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75.48
Published reference: Clarke 1954, 54, no. 9; Hd. B/C No. 8
[Analysed: see Ch. 18]
Fragment of around two thirds of a large copper alloy ring, made from a strip with rectangular cross-section. Broken at both ends.
Wt: 22.7g; D(ext): 52.0mm; W: 9.0mm; T: 3.8mm

B/C.71: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75.8
Published reference: Clarke 1954, 54, no. 7; Fig. 7; Hd. B/C No. 6
[Analysed: see Ch. 18]
Complete copper alloy large ring with flat, abutting terminals. Slightly oval in plan. Made from a strip with rectangular cross-section.
Wt: 25.7g; D(ext): 50.2mm; W: 6.8mm; T: 3.2mm

B/C.72: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75
Published reference: Clarke 1954, 54, no. 8; Hd. B/C No. 7
[Analysed: see Ch. 18]
Fragment of around half of a copper alloy large ring, made from a strip with rectangular cross-section. One end cut/broken, one tapered original end.
Wt: 11.5g; L: 50.0mm; W: 8.0mm; T: 2.8mm

B/C.73: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75
Published reference: Clarke 1954, 54, no. 10; Hd. B/C No. 9
[Analysed: see Ch. 18]
Fragment of a around a quarter of a copper alloy large ring, made from a strip with rectangular cross-section. Broken at one end, flat at the other.
Wt: 12.7g; L: 46.0mm; W: 8.0mm; T: 3.5mm

B/C.74: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75
Published reference: Clarke 1954, 54, no. 10; Hd. B/C No. 9
[Analysed: see Ch. 18]
Small fragment of a copper alloy large ring, made from a

B/C.86

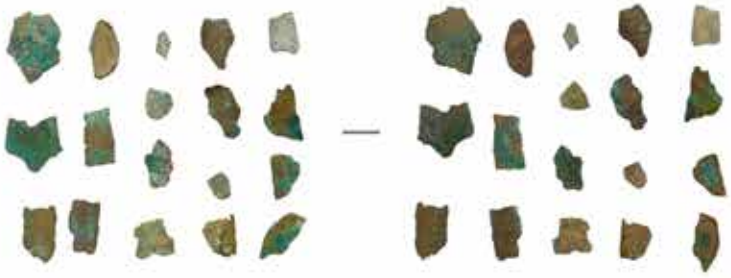
B/C.87

B/C.88

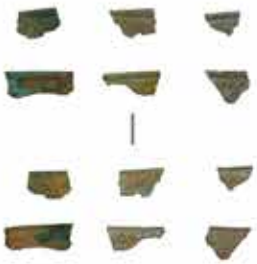
B/C.89

B/C90

B/C.91



B/C.92



B/C.93

B/C.94

B/C.95

B/C.96

0 5 10cm

Plate 14.16

strip with rectangular cross-section. Broken at both ends.
Wt: 5.2g; L: 31.0mm; W: 8.5mm; T: 2.0mm

B/C.75: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75
Published reference: Clarke 1954, 54, no. 10; Hd. B/C No. 9
[Analysed: see Ch. 18]
Small fragment of a copper alloy large ring, heavily corroded, made from a strip with rectangular cross-section. Tapers irregularly at one end, broken at the other.
Wt: 3.5g; L: 27.0mm; W: 9.0mm; T: 3.0mm

B/C.76: Copper alloy large ring (Pl. 14.15)
NCM: 1949.75
Published reference: Clarke 1954, 54, no. 10; Hd. B/C No. 9
[Analysed: see Ch. 18]
Small fragment of a copper alloy large ring, made from a strip with rectangular cross-section. Tapers towards one flat end, broken at the other.
Wt: 3.1g; L: 25.0mm; W: 7.0mm; T: 2.3mm

B/C.77: Copper alloy small ring (Pl. 14.15)
NCM: 1949.75.11
Published reference: Clarke 1954, 55, no. 5; Hd. B/C No. 11
[Analysed: see Ch. 18]
Complete copper alloy small ring with overlapping, slightly rounded terminals. Made from a strip with rectangular cross-section.
Wt: 12.6g; D(ext): 32.0mm; W: 9.0mm; T: 2.0mm

B/C.78: Copper alloy small ring (Pl. 14.15)
NCM: 1949.75.12
Published reference: Clarke 1954, 55, no. 6; Hd. B/C No. 12
Fragment of around two thirds of a copper alloy small ring, made from a strip with rectangular cross-section. Broken at one end, and one square, original terminal.
Wt: 7.3g; D(ext): 29.0mm; W: 6.2mm; T: 2.8mm

B/C.79: Copper alloy small ring (Pl. 14.15)
NCM: 1949.75.14
Published reference: Clarke 1954, 55, no. 8; Hd. B/C No. 14
[Analysed: see Ch. 18]
Complete copper alloy small ring with overlapping, slightly rounded terminals. Slightly distorted/oval in plan; made from a strip with rectangular cross-section.
Wt: 10.7g; D(ext): 29.0mm; W: 9.5mm; T: 2.0mm

B/C.80: Copper alloy small ring (Pl. 14.15)
NCM: 1949.75.16
Published reference: Clarke 1954, 55, no. 10; Hd. B/C No. 16
[Analysed: see Ch. 18]
Complete copper alloy small ring with slightly tapered, flat, abutting terminals. Made from a strip with rectangular cross-section.
Wt: 10.4g; D(ext): 29.0mm; W: 6.0mm; T: 3.0mm

B/C.81: Copper alloy small ring (Pl. 14.15)
NCM: 1949.75.17
Published reference: Clarke 1954, 56, no. 13; Hd. B/C No. 17
[Analysed: see Ch. 18]
Complete copper alloy small annular ring, made from a strip with rectangular cross-section. Hammered and part melted.
Wt: 10.6g; D(ext): 28.0mm; W: 6.5mm; T: 3.0mm

B/C.82: Copper alloy small ring (Pl. 14.15)
NCM: 1949.75.13
Published reference: Clarke 1954, 55, no. 7; Hd. B/C No. 13
[Analysed: see Ch. 18]
Complete copper alloy small ring with overlapping, slightly rounded terminals. Made from a strip with rectangular cross-section.
Wt: 12.7g; D(ext): 27.5mm; W: 7.5mm; T: 2.0mm

B/C.83: Copper alloy small ring (Pl. 14.15)
NCM: 1949.75.15
Published reference: Clarke 1954, 55, no. 9; pl. xii; Hd. B/C No. 15
[Analysed: see Ch. 18]
Complete copper alloy small spiral ring, made from a strip with rectangular cross-section. Around 1.6 turns; slightly tapered, flat ends.
Wt: 11.9g; D(ext): 22.5mm; W: 6.8mm; T: 2.0mm

B/C.84: Gold/silver alloy triangular ingot (Pl. 14.15)
NCM: 1949.75.193
Published reference: Clarke 1954, 58 (cake), no. 7; pl. xiii, upper; Hd. B/C No. 19
[Analysed: see Appendix 5]
Small triangular gold/silver alloy ingot with rounded corners, and slightly convex faces and sides. Irregular surface, smooth in some areas and pitted in others. From the base of a triangular crucible.
Wt: 50.8g; L: 44.0mm; T: 9.0mm

B/C.85: Gold/silver alloy linear ingot (Pl. 14.15)
NCM: 1949.75.52
Published reference: Clarke 1954, 58 (cake), no. 6; pl. xiii, upper; Hd. B/C No. 18
[Analysed: see Appendix 5]
Linear gold/silver alloy ingot with squarish cross-section and rounded ends. Slightly tapering towards one end.
Wt: 12.1g; L: 52.0mm; W: 6.0mm; T: 5.0mm

B/C.86: Gold/silver alloy linear ingot (Pl. 14.16)
NCM: 1949.75
Published reference: Clarke 1954, 58 (cake), no. 8; pl. xiii, upper; Hd. B/C No. 20
[Analysed: see Appendix 5]
Short length of linear gold/silver alloy ingot with flattened oval cross-section. Rounded at one end and cut at the other.
Wt: 11.6g; L: 20.0mm; W: 12.0mm; T: 11.0mm

B/C.87: Gold/silver alloy amorphous lump (Pl. 14.16)
NCM: 1949.75.49
Published reference: Clarke 1954, 58 (cake), no. 9; pl. xiii, upper; Hd. B/C No. 21
[Analysed: see Appendix 5]

Small, irregular gold/silver alloy lump or droplet. Irregular surface, smooth on one side, pitted on the other. Possibly waste from metalworking, or a melted object.
Wt: 12.9g; L: 23.0mm; W: 11.0mm; T: 7.0mm

B/C.88: Copper alloy scale pan (Pl. 14.16)
NCM: 1949.75.45
Published reference: Clarke 1954, 57, no. 4; pl. xiii, lower; fig. 8; Hd. B/C No. 22
[Analysed: see Ch. 18]
Disc of thin copper alloy sheet which has been folded into quarters. Slightly concave, with incised line around the circumference on both sides. There are three holes or fittings spaced equally around the edge of the disc. One is a small eyelet riveted onto the outside of the pan. The other two are small, pierced rivet holes, likely from similar eyelets. When complete, the object would thus presumably have had three small eyelets equally spaced around the edge.
Parallels: This object is most likely a scale pan for the accurate weighing out of small quantities of material. A ring through each of the eyelets would have allowed for its suspension on a steelyard balance. Such finds are more common from Roman and later contexts. See Crummy (1983, 99–100, fig. 104, 2508) for a similar Roman example from the mid-1st-century AD destruction levels at Colchester, and a detailed description of the functioning of a steelyard balance. A small and very simple scale pan was also recovered from a Roman site just to the south of Snettisham Village (Lyons 2004, 49, SF 84).

In the Roman period, steelyards of various sizes were used in weighing out of a wide variety of materials, from large commercial transactions in the order of kilograms, down to small quantities of spices or pharmaceuticals.

A decorated convex metal disc 106mm in diameter, and with three equally spaced holes around the circumference like the Snettisham pan, was recovered from the River Bann in Ireland (Raftery 1940). Raftery tentatively proposed that it might have been used as a balance pan (*ibid.*, 29). The decoration is La Tène in style, but the object cannot be closely dated.

Small equal-arm balance scales (with two arms rather than a single arm like a steelyard balance) are attested in Late Iron Age contexts both in Britain and on the continent, especially sites potentially associated with coin production, e.g. Verulamium (Wheeler and Wheeler 1936, 176–7). Various authors have proposed that these 'coin scales' might have been used to weigh out metals for alloying, or for checking the weights of metal pellets, coin blanks, or finished coins (Van Arsdell 1993; Wainwright and Spratling 1973, 115, 120).

In the context of Snettisham, it is possible that this scale pan was used for weighing out small quantities of metals for use in the mixing of different alloys for torc production, or to ascertain the weight of coins or ingots, but this remains speculative.
Wt: 17.3g; L: 40.0mm; approx. original diameter: *c.* 70mm

B/C.89 Copper alloy binding strip from hide-shaped shield (Pl. 14.16)
NCM: 1949.75.56
Published references: Clarke 1954, 57, no. 1; pl. xiii, lower; Hd. B/C No. 23. Stead (1991c, 24, 30, Type E No. 10)
[Analysed: see Ch. 18]
Two fragments of U-shaped copper alloy binding strip, each terminating in a knob at one end and broken at the other. The two fragments join at their knob terminals to give a V-shape, and would originally have formed the corner of a hide-shaped shield.
Parallels: Similar pieces of shield binding are known from Iron Age contexts across southern Britain (Stead 1991c, Type E, 30). A complete shield of this type was present in a burial at Mill Hill, Deal (Stead 1995b), while miniature shields in the same form were recovered from the Salisbury Hoard (Stead 1998).
Part 1: Wt: 3.5g; L: 68.0mm; W: 13.0mm; T: 0.2–0.3mm
Part 2: Wt: 5.0g; L: 86.0mm; W: 12.0mm; T: 0.2–0.3mm

B/C.90: Copper alloy fitting (Pl. 14.16)
NCM: 1949.75.44
Published reference: Clarke 1954, 58 (Misc.), no. 2; pl. xiii, lower, Misc. 2; Hd. B/C No. 25
[Analysed: see Ch. 18]
Curved section of hollow copper alloy sheet-metal fitting with heavily pitted surface.
Wt: 10.1g; L: 48.0mm; W: 23.0mm; T: 6.0mm

B/C.91: Copper alloy sheet (Pl. 14.16)
NCM: 1949.75
Published reference: Clarke 1954, 57, no. 7; Hd. B/C No. 24
[Analysed: see Ch. 18]
Eighteen fragments of heavily corroded copper alloy sheet, no original edges. The majority of the fragments are curved/distorted.
Wt: 6.7g; L: 19.0mm; T: 0.5mm

B/C.92: Copper alloy sheet (Pl. 14.16)
NCM: 1949.75
Published reference: Clarke 1954, 57, no. 7; Hd. B/C No. 24
[Analysed: see Ch. 18]
Six copper alloy sheet fragments, each with one original straight, thickened edge, with incised line.
Wt: 2.0g; L: 18.8mm (max.); T: 1.0mm (rim), 0.2–0.3mm (body)

B/C.93: Copper alloy sheet (Pl. 14.16)
NCM: 1949.75
Published reference: Clarke 1954, 57, no. 7; Hd. B/C No. 24
[Analysed: see Ch. 18]
Four fragments of slightly U-shaped copper alloy binding strip, each pierced through with a single, circular rivet hole.
Wt: 2.8g; L: 19.0mm (max.); T: 0.2–0.3mm

B/C.94: Copper alloy sheet (Pl. 14.16)
NCM: 1949.75
Published reference: Clarke 1954, 57, no. 7; Hd. B/C No. 24
[Analysed: see Ch. 18]
Four copper alloy sheet fragments, each with one possible original straight edge.
Wt: 1.1g; L: 17.8mm; T: 0.2–0.3mm

Plate 14.17

B/C.95: Copper alloy binding strip (Pl. 14.16)
NCM: 1949.75
Published reference: Clarke 1954, 57, no. 7; Hd. B/C No. 24
[Analysed: see Ch. 18]
Fragment of U-shaped copper alloy binding strip, broken on all edges.
Wt: 0.6g; L: 36.2mm; T: 0.2–0.3mm

B/C.96: Metalworking waste (slag) (Pl. 14.16)
NCM: 1949.75
Amorphous lump of metalworking waste, probably iron slag.
Wt: 13.4g; L: 38.0mm; W: 23.8mm; T: 11.8mm

Hoard D

Found during ploughing in 1950.

D.1a–b: Composite group (interlinked) (Pl. 14.17)
BM: 1951,0402.1
Large ring D.1b is looped through one of the terminals of torc D.1a.
Wt: 1060.8g (total for D.1a–b)
D.1a: Gold/silver alloy torc
Published reference: Clarke 1954, 47, no. 13; pl. x
MSCC: (2P)R
Gold/silver alloy multi-strand torc, with Stage II neck-ring formed from two thick circular-section rods plied tightly together. The rods are broken in several places and have been repaired using modern conservation methods. The double loop terminals are formed from the ends of the two neck-ring rods, with each rod terminating in an open loop at each end.
D(ext): 215.0mm; D(nr): 17.1mm; D(wire): 9.0mm; D(term): 39.7 and 40.3mm
D.1b: Gold/silver alloy large ring
Published reference: Clarke 1954, 47, no. 16; pl. x
Complete gold/silver alloy large ring with tapering terminals which overlap by around half a turn. Made from a strip with rectangular cross-section.
D(ext): 44.5mm; W: 10.0mm; T: 2.4mm

E.1a-c

E.1a

E.1b

E.1c

0 5 10cm

Hoard E

Found during ploughing in 1950.

E.1a–c: Composite group (interlinked, inserted) (Pl. 14.18)

When found, torc fragment E.1b was looped through the terminals of the 'Great Torc' E.1a, and bracelet E.1c was threaded onto E1.b (**Fig. 20.32** shows a reconstruction of the original grouping). The coin (Cat. no. 169) was found inserted into one of the terminals of the 'Great Torc'.

E.1a: Gold/silver alloy torc
MSCC: (8C(8C))R
BM: 1951,0402.2
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc with complex ornamented torus terminals, known as the 'Great Torc' (see **Figs 17.57, 17.82–93, 17.95–7, 17.101, 20.2–3, 20.14, 21.14**). The major areas of decoration appear towards the front of each terminal, within an oval-shaped panel with tapering wings on either side. The collars are also decorated on their outer sides with similar designs. The decoration on each terminal is different but the patterns of both are made up of raised lobes framing hatched trumpet and circle motifs. Stage III neck-ring formed from eight ropes coiled together around a hollow core; each rope is formed from eight coiled circular-section wires. Total number of wires is 64. At least two wires are broken close to one of the terminals. See Chapter 17 for information on construction, and Chapter 21 for a full discussion of decoration.
Wt: 1084.0g; D(ext): 199.0mm; D(nr): 25mm at the back expanding to 30mm near the terminals; D(rope): 7.3mm; D(wire): 1.6mm; D(term): 56.3 and 56.5mm

E.1b: Gold/silver alloy torc
MSCC: (2P)R
BM: 1951,0402.3
Gold/silver alloy multi-strand torc fragment, comprising one buffer terminal and part of the neck-ring. Stage II construction of two thick, circular-section wires plied tightly together. Terminal has rounded edges and the face is dished within a raised rim. On the underside there is a rounded, raised rim, then a concentric concavity which rises in the centre towards the neck-ring strands. There are tiny fragments, including wire 1.4mm diameter, fused (with melted drops) on the face of the terminal and another slight accretion on one of the strands. The ends of the broken strands are quite different: one is a sharp break, whilst the other has a slightly raised rim, suggesting a stress fracture. Both are clearly ancient breaks, snapped off rather than cut. The whole fragment is bent into a U-shape to pass through the terminals of E.1a.
Wt: 124.0g; D(nr): 7.1mm; D(wire): 3.6mm; D(term): 36.3mm; L: 109.4mm

E.1c: Gold/silver alloy bracelet
BM: 1951,0402.4
Gold/silver alloy sheet bracelet, hollow (see **Fig. 21.40**). The exterior is ornamented in the same style as E.1a, with two opposing scrolls comprising hatched motifs linked by flowing raised lobe motifs. A line runs along the middle separating the two scrolls. The raised decoration is bordered on both sides by an inscribed pattern of joining semi-circles set within two parallel lines. A central indented line runs around the centre circumference of the interior. See Chapter 21 for a full discussion of decoration.
Wt: 111.0g; D(ext): 96.8mm; W: 17.4mm; T: 8.9mm

Hoard F

Found during detecting by Charles Hodder in 1990. Finds with Jackson numbers were recovered by Hodder; finds with BM site codes were located during the subsequent BM excavations. All found in the Hoard F pit unless otherwise stated.

F.1a–e: Composite group (interlinked) (Pl. 14.19)

Rings and torc/bracelet fragments F.1b–e are looped onto large ring F.1a (**Fig. 23.4**).

F.1a: Gold/silver alloy large ring
BM: 1991,0501.1; Jackson no.: 1a
Gold/silver alloy large penannular ring with one tapered terminal and one cut end. Made from a strip with rectangular cross-section.
Wt: 71.0g; D(ext): 67.0mm; W: 7.0mm; T: 4.0mm

F.1b: Gold/silver alloy large ring
BM: 1991,0501.2; Jackson no.: 1b
Complete gold/silver alloy large ring, with overlapping flat terminals. Made from wire with circular cross-section.
Wt: 69.9g; D(ext): 66.0mm; D(wire): 6.0mm

F.1c: Gold/silver alloy torc
TUBULAR (TYPE 1)
BM: 1991,0501.5; Jackson no.: 1c
Gold/silver alloy terminal from Type 1 tubular torc. Plain, with a slight rim around the circumference of the dished face. The remains of the narrow tubular neck-ring have been flattened and made into a loop, which protrudes on the reverse of the terminal.
Does not seem to be a pair to F.1d.
Wt: 18.0g; D(term): 35.0mm

F.1d: Gold/silver alloy torc
TUBULAR (TYPE 1)
BM: 1991,0501.3; Jackson no.: 1e
Gold/silver alloy terminal from Type 1 tubular torc. Plain with a prominent raised rim and slightly concave circle in the centre of the face. The remains of the narrow tubular neck-ring have been flattened and made into a loop, which protrudes on the reverse of the terminal.
Does not seem to be a pair to F.1c.
Wt: 20.0g; D(term): 37.0mm

F.1e: Gold/silver alloy torc/bracelet
MSCC: (2P)R/ (3P(2P))R
BM: 1991,0501.4; Jackson no.: 1d
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body: three ropes, each of two wires plied together, have been loosely twisted together and arranged into a rough loop. It is not clear if this is a short section of Stage III neck-ring/body (3P(2P))R, or lengths of a Stage II (2P)R

F.1a-e
F.1b
F.1e
F.1a
F.1d
F.1c
F.2a-i
F.2c
F.2d
F.2e
F.2f
F.2h
F.2g
F.2b
F.2a
F.2i
F.3a-i
F.3c
F.3d
F.3b
F.3a
h
i
F.3h-i
F.3g
F.3f
F.3e
F.3h-i
F.4a-f
F.4c
F.4b
F.4a
F.4e
F.4f
F.4d
F.5a-g
F.5c
F.5a
F.5d
F.5g
F.5f
F.5b
F.5e
F.6a-g
F.6c
F.6d
F.6e
F.6a
F.6b
F.6f
F.6g
0
5
10cm

Plate 14.19

neck-ring/body twisted together. A single additional strand of circular-section wire is fused onto one of the ropes.
Wt: 75.0g; D(ext): 48.0mm; D(nr): 13.0mm; D(rope): 5.0mm; D(wire): 2.2mm

F.2a–i: Composite group (interlinked) (Pl. 14.19)
Torc fragment F.2a is clamped over the join where the ends of wire loop F.2b meet. F.2c–i are looped onto this ring. Torc and wire fragments F.2c–i are looped onto F.2a–b. The components of F.2c are fused together. Tubular torc fragment F.2e is looped onto the wire through a pierced hole. Torc fragment F.2f is strung onto the wire through its loop terminal.
Wt: 135.0g (total for F.2a–i)

F.2a: Gold/silver alloy torc
TUBULAR (TYPE 1)
BM: 1991,0501.6; Jackson no.: 2a
Short length of neck-ring from gold/silver alloy Type 1 tubular torc.
L: 35.9mm

F.2b: Gold/silver alloy wire
BM: 1991,0501.6; Jackson no.: 2a
Length of gold/silver alloy twisted wire, bent into a loop.
D(ext): 66.6mm; D(wire): 1.5mm

F.2c: Gold/silver alloy torc
?TUBULAR
BM: 1991,0501.7; Jackson no.: 2b
Irregularly bent and looped length of gold/silver alloy twisted wire (similar to F.2a) with two small fused gold/silver alloy attachments: one an amorphous melted lump, the other a piece of sheet (probably from a tubular torc or torus torc terminal) with concentric circle decoration (see **Fig. 21.7**). There are similar concentric circle motifs on both tubular torcs such as S.13 and the torus terminals of the 'Great Torc', E.1a.
D(wire): 1.6mm; L: 29.9mm

F.2d: Gold/silver alloy torc/bracelet
MSCC: (3P)R
BM: 1991,0501.8; Jackson no.: 2c
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends: Stage II rope, formed from three circular-section strands of wire tightly plied together. The rope is folded in half and loosely twisted on itself.
D(nr): 2.6mm; D(wire): 1.1mm; L: 65.5mm

F.2e: Gold/silver alloy torc
TUBULAR (TYPE 4/5)
BM: 1991,0501.9; Jackson no.: 2d
Gold/silver alloy sheet fragment – a flattened section from the neck-ring of a Type 4 or 5 tubular torc. Roughly torn at both ends, pierced through near one end.
L: 56.0mm; T: 0.2mm

F.2f: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.10; Jackson no.: 2e
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one double-loop terminal (a continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied tightly together. The whole fragment is coiled round into a loop.
D(ext): 20.2mm; D(nr): 3.2mm; D(wire): 1.7mm; D(term): 8.1mm

F.2g: Gold/silver alloy torc
TUBULAR (TYPE 3)
BM: 1991,0501.11; Jackson no.: 2f
Gold/silver alloy buffer terminal from Type 3 tubular torc; flattened, damaged and perforated through the centre of the terminal. Flat face with raised outer rim. Behind the terminal the neck-ring widens into a bead with concentric rim. Torn across at start of neck-ring.
Does not appear to be a pair to F.2h. Similar, although not the pair, to F.35, F.47 and F.48.
D(term): 55.0mm; L: 39.9mm

F.2h: Gold/silver alloy torc
TUBULAR (TYPE 3)
BM: 1991,0501.13; Jackson no.: 2g
Gold/silver alloy buffer terminal from Type 3 tubular torc; flattened, damaged and perforated through the centre of the terminal. Smooth, dished face with raised rim, and outer band around the edge textured with small tool marks. Torn across at start of neck-ring.
Does not appear to be a pair to F.2g.
D(term): 59.5mm; L: 23.6mm

F.2i: Gold/silver alloy wire
BM: 1991,0501.12; Jackson no.: 2h
Short length of gold/silver alloy circular-section wire, roughly formed into a small ring with overlapping ends.
D(ext): 9.0mm; D(wire): 1.4mm

F.3a–i: Composite group (interlinked) (Pl. 14.19)
Large ring and torc/bracelet fragments F.3b–h are looped onto large ring F.3a. F.3b, c and g are looped on through their terminals. Torc/bracelet fragment F.3i is looped onto F.3h (see **Fig. 20.29**).
Wt: 110.6g (total for F.3a–i)

F.3a: Gold/silver alloy large ring
BM: 1991,0501.120; Jackson no.: 3a
Complete gold/silver alloy large ring with slightly overlapping rounded, tapering terminals. Slightly irregular ovoid shape in plan. Made from a strip with rectangular cross-section.
Wt: 37.0g; D(ext): 74.3mm; W: 6.9mm; T: 3.0mm

F.3b: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.121; Jackson no.: 3b
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one double-loop terminal (a continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II

construction of two circular-section wires plied tightly together.
Wt: 13.2g; D(nr): 4.6mm; D(wire): 2.5mm; D(term): 10.7mm; L: 56.8mm

F.3c: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.122; Jackson no.: 3c
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one ring terminal (formed from the two neck-ring/body wires, with additional metal added to thicken it), and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied tightly together. The broken end is a fused mass, as if the fragment has been partially melted.
Wt: 29.7g; D(ext): 54.0mm; D(nr): 7.1mm; D(wire): 3.5mm; D(term): 13.2mm

F.3d: Copper alloy large ring
BM: 1991,0702.10; Jackson no.: 3d
Copper alloy large ring with abutting terminals. Made from a strip with rectangular cross-section. One tapering, slightly rounded terminal and one cut end.
Wt: 14.0g; D(ext): 47.0mm; W: 6.4mm; T: 1.8mm

F.3e: Gold/silver alloy torc/bracelet
MSCC: (4PZ)R
BM: 1991,0501.123; Jackson no.: 3e
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of four circular-section wires plied together Z-twist. This rope is bent into an oval ring with overlapping ends, both of which are cut.
D(nr): 3.0mm; D(wire): 1.2mm; L: 27.4mm

F.3f: Copper alloy torc/bracelet
MSCC: (2P(2P))R
BM: 1991,0702.11; Jackson no.: 3f
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage III construction with cable formed from two ropes plied together, each of which is made up of two circular-section wires which are themselves plied tightly together. The short length of cable is bent into a teardrop-shaped loop with touching ends.
Wt: 10.3g; D(nr): 5.8mm; D(rope): 3.0mm; D(wire): 1.6mm; L: 42.5mm

F.3g: Copper alloy torc/bracelet
MSCC: (4P)?Q
BM: 1991,0702.12; Jackson no.: 3g
Fragment of copper alloy multi-strand torc or bracelet, comprising one double-loop terminal (a continuous loop formed from a pair of wires doubled back on themselves, extending to form the four neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II construction of four wires plied together. The wires are not well preserved, but are possibly square in cross-section.
Wt: 3.3g; D(nr): 4.0mm; D(wire): 1.4mm; D(term): 15.4mm; L: 43.3mm

F.3h: Gold/silver alloy torc/bracelet
MSCC: (2PZ)Q
BM: 1991,0501.124; Jackson no.: 3h
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one loop terminal (a single continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, cut at the other end. Stage II construction of two square-section wires plied loosely together Z-twist. The fragment is bent into a ring with the cut ends overlapping with the terminal.
Probably part of the same original object as F.3i, with which it is interlinked.
D(ext): 20.1mm; D(nr): 2.3mm; D(wire): 1.4mm; D(term): 10.2mm

F.3i: Gold/silver alloy torc/bracelet
MSCC: (2PZ)Q
BM: 1991,0501.124; Jackson no.: 3h
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two square-section wires plied loosely together Z-twist. The fragment is bent into a ring with the cut ends overlapping. Probably part of the same original object as F.3h, with which it is interlinked.
D(ext): 13.4mm; D(nr): 2.3mm; D(wire): 1.4mm

F.4a–f: Composite group (interlinked) (Pl. 14.19)
Torc and bracelet fragments F.4a–f are interlinked in a complex way. F.4a passes through the terminal of F.4b. F.4b and a loop at the end of F.4d both pass through the terminal of F.4c. F.4d also passes through the terminal of F.4e. F.4f is looped through the terminal of F.4d.
Wt: 405.0g (total for F.4a–f)

F.4a: Gold/silver alloy torc
MSCC: (6C)T
BM: 1991,0501.46; Jackson no.: 53a
Fragment of gold/silver alloy multi-strand torc, comprising one terminal and length of Stage II neck-ring formed from six twisted wires coiled together. The neck-ring is very distorted and fragmentary, with clear evidence of wear of the internal faces of the wires, where they once touched and rubbed together. The wires are individually cut or broken away at different lengths. Elaborate cage terminal formed from the neck-ring wires, with involuted loops and additional applied scroll and pellet motifs. In the area of the terminal, the wires are circular, rather than square, in cross-section. Some evidence that the terminal has been part melted on one side.
D(wire): 1.5mm; D(term): 20.5mm; L: 91.9mm

F.4b: Gold/silver alloy torc
MSCC: (4C)T
BM: 1991,0501.47; Jackson no.: 53b
Fragment of gold/silver alloy multi-strand torc, comprising ring terminal and length of neck-ring, the wires being cut/broken to different lengths. Stage II construction of four twisted wires coiled together. The terminal is a pair of confronted, thickened circular-section rings, each a continuous loop extending to form a pair of square-section twisted wires. These two pairs form the four neck-ring

strands. The whole fragment is bent into an S-shape.
D(nr): 6.4mm; D(wire): 2.7mm; D(term): 16.7mm; L: 130.6mm

F.4c: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.48; Jackson no.: 53c
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one loop/ring terminal (a continuous, perhaps slightly thickened, loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied tightly together. The end of the terminal is partially melted, and small pellets of melted gold adhere to the neck-ring wires in several places.
D(nr): 10.1mm; D(wire): 5.1mm; D(term): 23.1mm; L: 106.9mm

F.4d: Gold/silver alloy torc/bracelet
MSCC: (2PZ)R
BM: 1991,0501.49; Jackson no.: 53d
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one double-loop terminal (a continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied tightly together Z-twist. The broken end is bent back on itself to form a teardrop-shaped loop.
D(nr): 6.0mm; D(wire): 2.4mm; D(term): 15.3mm; L: 102.6mm

F.4e: Gold/silver alloy torc/bracelet
MSCC: (3P(2P))R
BM: 1991,0501.50; Jackson no.: 53e
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one triple-loop terminal and a length of Stage III neck-ring/body, cut at the other end. The cable is formed from three ropes plied together, each of which is made up of two circular-section wires which are themselves plied tightly together. The terminal consists of three loops, each a continuous loop extending to form the two wires of one of the ropes. The torc fragment is bent back on itself to form a U-shape.
D(nr): 8.7mm; D(wire): 2.1mm; D(term): 11.4mm; L: 50.8mm

F.4f: Gold/silver alloy torc
TUBULAR (TYPE 1)
BM: 1991,0501.51; Jackson no.: 53f
Fragment of gold/silver alloy Type 1 tubular torc neck-ring: a tube which tapers to a solid rod at the narrower end. Broken at both ends. A small melted mass with partially coalesced gold wire fragments is fused to the hollow end. The fragment has been bent back on itself, to form a loop.
D(nr): 7.2mm; L: 82.8mm; W: 28.3mm

F.5a–g: Composite group (interlinked) (Pl. 14.19)
Ring, torc/bracelet and wire fragments F.5b–g are looped onto large ring F.5a. F.5c is looped on through its terminal (see **Figs 17.1, 17.18**, **20.30**).
Wt: 281.3g (total for F.5a–g)

F.5a: Gold/silver alloy large ring
BM: 1991,0501.53; Jackson no.: 55a
Gold/silver alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. One tapered terminal and one cut end.
D(ext): 44.8mm; L: 7.2mm; W: 3.7mm

F.5b: Gold/silver alloy large ring
BM: 1991,0501.54; Jackson no.: 55b
Gold/silver alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. One tapered terminal and one cut end.
D(ext): 50.2mm; L: 7.7mm; W: 2.0mm

F.5c: Gold/silver alloy torc
MSCC: (2P)R
BM: 1991,0501.55; Jackson no.: 55c
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc, comprising one thickened ring terminal (formed from the ends of the neck-ring wires) and length of neck-ring, cut at the other end (see **Fig. 17.18a**). Stage II construction of two circular-section wires plied together. Flaws are visible on the terminal, and the neck-ring shows evidence of cracking, cut-marks or chisel blows, and melting.
D(nr): 11.8mm; D(wire): 5.9mm; D(term): 27.2mm; L: 90.6mm

F.5d: Gold/silver alloy torc/bracelet
MSCC: (4P(2P))R
BM: 1991,0501.56; Jackson no.: 55d
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends and roughly shaped into a ring. Stage III construction with cable formed from four ropes plied loosely together, each of which is made up of two circular-section wires which are themselves plied tightly together. Gold sheet fragments and droplets are fused on in several places.
D(nr): 11.0mm; D(rope): 4.4mm; D(wire): 2.1mm; L: 43.9mm

F.5e: Gold/silver alloy wire
BM: 1991,0501.57; Jackson no.: 55e
[Analysed: see Ch. 17]
Short length of twisted gold/silver alloy wire, cut or broken at both ends and roughly shaped into a ring.
D(wire): 1.7mm; L: 28.1mm

F.5f: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.58; Jackson no.: 55f
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied loosely together. The fragment is bent into a ring with the cut ends overlapping.
D(nr): 3.0mm; D(wire): 1.4mm; L: 32.9mm

F.5g: Gold/silver alloy torc
TUBULAR (TYPE 1)

BM: 1991,0501.59; Jackson no.: 55g
Fragment of gold/silver alloy Type 1 tubular torc neck-ring, a hollow tube of thin sheet, broken at both ends. Distorted and roughly shaped into a ring.
D(nr): 9.0mm; L: 32.4mm

F.6a–g: Composite group (interlinked) (Pl. 14.19)
Rings and torc/bracelet fragments F.6b–g are looped onto large ring F.6a (see **Fig. 20.31**).
Wt: 211.6g (total for F.6a–g)

F.6a: Gold/silver alloy large ring; torc
MSCC: (4C)T
BM: 1991,0501.103; Jackson no.: 116a
Complete gold/silver alloy large penannular ring of solid circular cross-section, slightly bent out of shape, with flat-ended terminals. There is a melted cavity about half-way around the ring. There are globules and lumps of semi-coalesced gold fused to the object in several places, and a mass of part-melted fragments fused to one half of the inner surface. The major component of this fused mass is a fragment of gold/silver alloy torc neck-ring or bracelet body, comprising four twisted wires coiled together, melted and broken at the ends. Other fused fragments include twisted wires and a strand of circular-section wire.
D(ext): 74.7mm; D(wire): 5.6mm

F.6b: Gold/silver alloy torc
TUBULAR (TYPE 4)
BM: 1991,0501.104; Jackson no.: 116b
Terminal fragment of gold/silver alloy Type 4 tubular torc: torn, crushed and distorted (see **Fig. 21.22**). At the terminal, the exterior of the neck-ring is decorated with repoussé and chased ornament as well as punch-marks. Overall, the pattern is in the form of an elongated lyre; the background is stippled, but the raised motifs are predominantly plain, although some of the motifs, particularly the raised sections delineating the lyre, are laddered. The expanded terminal has a round, dished end-plate, with a repoussé circular 'segmented wreath' and a small central circular hole/perforation. There is a similar perforation through the neck-ring near its broken end, and another, smaller one just short of the terminal. A large ragged hole was also punched through the broken end of the neck-ring, probably to allow suspension. See Chapter 21 for a full discussion of decoration.
D(term): 25.1mm; L: 71.9mm

F.6c: Gold/silver alloy small ring
BM: 1991,0501.105; Jackson no.: 116c
Gold/silver alloy small penannular ring, made from a strip with rectangular cross-section. One tapering terminal and one cut end.
D(ext): 27.2mm; W: 9.8mm; T: 2.5mm

F.6d: Gold/silver alloy large ring
BM: 1991,0501.106; Jackson no.: 116d
Complete gold/silver alloy large ring of solid circular cross-section, with overlapping flat-ended terminals.
D(ext): 40.7mm; D(wire): 3.9mm

F.6e: Gold/silver alloy small ring
BM: 1991,0501.107; Jackson no.: 116e
Complete gold/silver alloy small spiral ring, made from a strip with rectangular cross-section. Neatly rounded tapering terminals, overlapping by just over half a turn.
D(ext): 27.5mm; W: 10.8mm; T: 1.8mm

F.6f: Gold/silver alloy torc/bracelet
MSCC: (5C)R
BM: 1991,0702.2; Jackson no.: 116f
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut or broken at both ends. Stage II construction of five circular-section wires coiled together. The fragment is bent into a ring, with the ends slightly overlapping.
D(nr): 3.7mm; L: 34.2mm

F.6g: Gold/silver alloy small ring
BM: 1991,0501.108; Jackson no.: 116g
Complete gold/silver alloy small spiral ring made from a strip with rectangular cross-section. One tapering terminal and one cut end, overlapping by around half a turn.
D(ext): 28.2mm; D(wire): 1.2mm; W: 12.0mm; T: 2.7mm

F.7a–g: Composite group (interlinked) (Pl. 14.20)
Torc/bracelet/wire fragments F.7b–g are looped onto large ring F.7a. All are looped through their terminals, except for F.7e, which is looped on as a ring (see **Fig. 23.3**).
Wt: 291.5g (total for F.7a–g)

F.7a: Gold/silver alloy large ring
BM: 1991,0702.3; Jackson no.: 117a
Gold/silver alloy large penannular ring of irregular, oval shape, formed from circular-section wire.
D(ext): 138.4mm; D(wire): 4.5mm

F.7b: Gold/silver alloy wire/?torc/?bracelet
MSCC: ?(2P)T
BM: 1991,0501.109; Jackson no.: 117b
Fragment of gold/silver alloy twisted wire, bent back and plied on itself, with a small loop at the fold. It may be from a multi-strand torc or bracelet, with Stage II neck-ring/body and simple loop terminal, but the use of twisted wire for the terminal portion would be unusual.
D(nr): 4.4mm; D(wire): 2.3mm; L: 58mm

F.7c: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0702.4; Jackson no.: 117c
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one double-loop terminal (a continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied tightly together.
D(nr): 3.6mm; D(wire): 2.5mm; D(term): 17.8mm; L: 67.9mm

F.7d: Gold/silver alloy torc/bracelet
MSCC: (2P(2PZ))R
BM: 1991,0501.110; Jackson no.: 117d

Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one thickened ring terminal, continuing into the paired ropes of the neck-ring/body. Stage III construction of two ropes plied loosely together, each of which is made up of two circular-section wires which are themselves plied tightly together Z-twist. Each of the ropes is cut/broken at a different point.
D(nr): 7.8mm; D(rope): 3.9mm; D(wire): 2.0mm; D(term): 18.8mm; L: 82.6mm

F.7e: Gold/silver alloy wire/?torc/bracelet
MSCC: (2P)T
BM: 1991,0501.111; Jackson no.: 117e
Fragment of gold/silver alloy twisted wire, cut or broken at both ends, bent/looped and plied back on itself. Possibly part of a multi-strand torc or bracelet, comprising a simple cage terminal and length of neck-ring/body with Stage II construction. The ?terminal is formed from the continuous, looped wire, folded into two involuted loops. The whole fragment is curled into a ring.
D(nr): 6.0mm; D(wire): 3.3mm; L: 64.5mm

F.7f: Gold/silver alloy bracelet
MSCC: (2P)R
BM: 1991,0501.112; Jackson no.: 117f
Broken gold/silver alloy multi-strand bracelet, Stage II body formed from two circular-section wires plied together. One of the wires is broken in the middle, and the whole is heavily bent and distorted. One terminal is a double-hook terminal formed from the two ends of the wire, and the other is a simple loop where the wire has been bent back on itself.
D(nr): 5.6mm; D(wire): 2.7mm; D(term): 13.5mm; L: 146.2mm

F.7g: Gold/silver alloy torc/bracelet
MSCC: (3P)2R+1T
BM: 1991,0501.113; Jackson no.: 117g
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one ring terminal and a length of neck-ring/body, cut or broken and part melted at the other end. Stage II construction formed from two circular-section and one (discontinuous) twisted wire, plied together. The thickened ring terminal is a continuous loop extending to become the pair of circular-section neck-ring/body wires. The end of the twisted wire is looped around the base of the terminal. There is a mass of semi-coalesced globules and plied paired wire fragments fused to the neck-ring.
D(nr): 7.5mm; D(wire): 3.3mm; D(term): 16.3mm; L: 78.9mm

F.8a–e: Composite group (interlinked) (Pl. 14.20)
Wire/strip and torc/bracelet fragments F.8b–e are looped through the terminal of F.8a. In the case of torc/bracelet fragment F.8b, the body of the loop rather than the terminal is used.
Wt: 19.3g (total for F.8a–e)

F.8a: Gold/silver alloy torc
MSCC: (2P(3P))R
BM: 1991,0702.62; Jackson no.: 262a
Fragment of gold/silver alloy multi-strand torc, comprising one thickened ring terminal, continuing into the paired ropes of the neck-ring/body, which are broken at slightly different points. Stage III construction of two ropes plied loosely together, each of which is made up of three circular-section wires which are themselves plied tightly together.
D(nr): 3.6mm; D(wire): 1.7mm; D(term): 21.8mm; L: 55.2mm

F.8b: Copper alloy torc/bracelet
MSCC: (2PZ)R
BM: 1991,0702.63; Jackson no.: 262b
Fragment of copper alloy multi-strand torc or bracelet, comprising a single-loop terminal (a continuous loop extending to form the two neck-ring/body wires) and length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied together Z-twist. The whole fragment is curved into a teardrop-shaped loop.
D(nr): 3.0mm; D(wire): 1.6mm; D(term): 6.4mm; L: 50.1mm

F.8c: Copper alloy wire/strip
BM: 1991,0702.64; Jackson no.: 262c
Fragment of copper alloy wire/strip with squarish cross-section, bent into a polygonal loop.
D(ext): 24mm; L: 24mm; T: 1.6mm

F.8d: Copper alloy wire/strip
BM: 1991,0702.65; Jackson no.: 262c
Fragment of copper alloy wire/strip with squarish cross-section, bent into a polygonal loop.
D(ext): 25.9mm; L: 25.9mm; T: 1.6mm

F.8e: Copper alloy wire/strip
BM: 1991,0702.66; Jackson no.: 262c
Fragment of copper alloy wire/strip with squarish cross-section, bent into a polygonal loop. One additional loose fragment.
D(ext): 25.2; 14.0mm; L: 25.2; 14.0mm; T: 1.6mm

F.9a–d: Composite group (interlinked) (Pl. 14.20)
Torc/bracelet fragments F.9a–d are believed to have been an interlinked group, as they were presented by the finder looped together on a piece of twine (though without written comment).

F.9a: Gold/silver alloy torc/bracelet
MSCC: (4P)T
BM: 1991,0501.125; Jackson no.: 4a
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one thickened ring terminal: a continuous loop continuing into two pairs of neck-ring/body wires. These two pairs form the four neck-ring/body strands. Stage II construction, originally of four twisted strands plied together, though one strand is now missing, broken off at the terminal. The whole fragment is bent into a teardrop shape with crossed ends.
Wt: 10.9g; D(ext): 38.9mm; D(nr): 4.5mm; D(wire): 1.8mm; D(term): 9.6mm

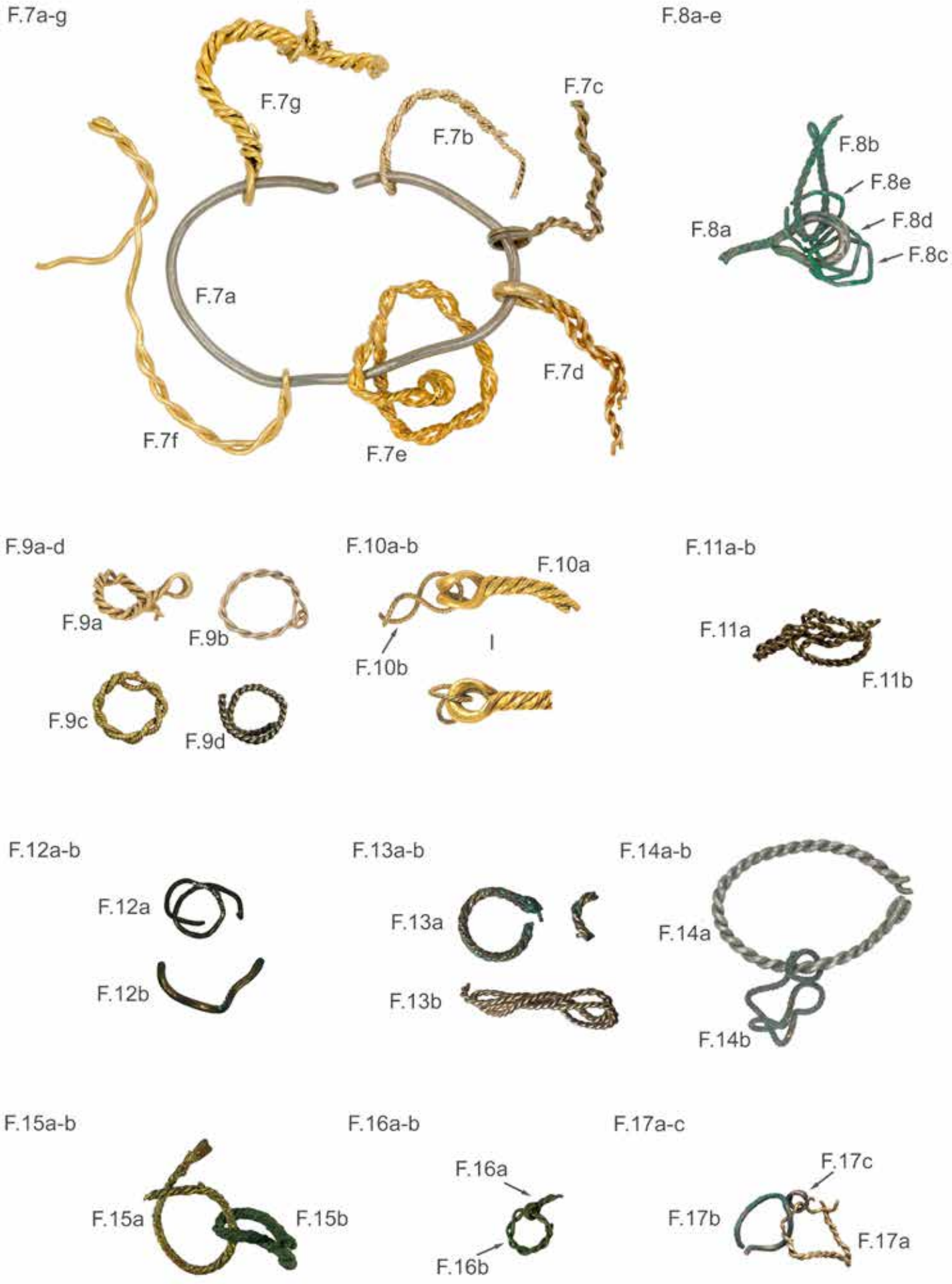

F.7a-g
F.7g
F.7c
F.7b
F.7a
F.7d
F.7f
F.7e
F.8a-e
F.8b
F.8e
F.8d
F.8a
F.8c
F.9a-d
F.9a
F.9b
F.9c
F.9d
F.10a-b
F.10a
F.10b
F.11a-b
F.11a
F.11b
F.12a-b
F.12a
F.12b
F.13a-b
F.13a
F.13b
F.14a-b
F.14a
F.14b
F.15a-b
F.15a
F.15b
F.16a-b
F.16a
F.16b
F.17a-c
F.17c
F.17b
F.17a
0
5
10cm

Plate 14.20

F.9b: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.126; Jackson no.: 4b
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one single-loop terminal (a continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, cut at the other end. Stage II construction of two circular-section wires plied tightly together. The whole fragment is bent into a circle, with the cut ends protruding through the terminal.
Wt: 4.4g; D(ext): 35.0mm; D(nr): 3.4mm; D(wire): 1.4mm; D(term): 8.0mm

F.9c: Gold/silver alloy torc/bracelet
MSCC: (2P)T
BM: 1991,0501.127; Jackson no.: 4c
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two twisted wires plied loosely together. The whole fragment is bent into a circle, with the cut ends overlapping.
Wt: 10.1g; D(ext): 29.3mm; D(nr): 4.8mm; D(wire): 2.2mm

F.9d: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.128; Jackson no.: 4d
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied tightly together. The whole fragment is bent into a circle, with the cut ends overlapping by around half a turn.
Wt: 6.4g; D(ext): 27.0mm; D(nr): 3.3mm; D(wire): 1.5mm

F.10a–b: Composite group (interlinked) (Pl. 14.20)
Wire fragment F.10b is looped through the terminal of torc fragment F.10a.
Wt: 34.5g (total for F.10a–b)

F.10a: Gold/silver alloy torc/bracelet
MSCC: (4P)T
BM: 1991,0501.40; Jackson no.: 46a
Fragment of gold/silver alloy multi-strand torc or bracelet comprising a ring/cage terminal, and a length of neck-ring/body, broken at the other end. Stage II construction of four twisted wires plied loosely together. The terminal is a pair of confronted, thickened circular-section rings, each a continuous loop extending to form a pair of square-section twisted wires. These two pairs form the four neck-ring strands.
D(nr): 7.6mm; D(wire): 3.2mm; D(term): 14.7mm; L: 57.7mm

F.10b: Gold/silver alloy wire
BM: 1991,0501.41; Jackson no.: 46b
Fragment of gold/silver alloy twisted wire, broken at both ends. Bent into a loose figure of eight.
D(wire): 2.0mm; L: 35.8mm

F.11a–b: Composite group (interlinked) (Pl. 14.20)
MSCC: (2PZ)R
Torc/bracelet fragments F. 11a and F.11b are interlinked, and probably originally formed part of the same object. Each is a fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a crude ring. Stage II construction of two circular-section wires plied together Z-twist.
Wt: 12.2g (total for F.11a–b)

F.11a: Gold/silver alloy torc/bracelet
BM: 1991,0501.133; Jackson no.: 22a
[Analysed: see Ch. 17]
D(nr): 3.2mm; D(wire): 1.5mm; L: 51.6mm

F.11b: Gold/silver alloy torc/bracelet
BM: 1991,0501.133; Jackson no.: 22b
D(nr): 3.2mm; D(wire): 1.5mm; L: 35.2mm

F.12a–b: Composite group (interlinked) (Pl. 14.20)
Wire fragments F.12a and F.12b were originally interlinked.

F.12a: Gold/silver alloy wire
BM: 1991,0702.51; Jackson no.: 205a
Fragment of gold/silver alloy circular-section wire, broken at both ends. Roughly coiled into a loose two-turn spiral.
Wt: 3.1g; D(wire): 1.9mm; L: 31.5mm

F.12b: Gold/silver alloy wire
BM: 1991,0702.50; Jackson no.: 205b
Fragment of gold/silver alloy circular-section wire, bent and distorted, broken at both ends.
Wt: 3.8g; D(wire): 3.1mm; L: 41.9mm

F.13a–b: Composite group (interlinked) (Pl. 14.20)
Torc/bracelet fragments F.13a and F.13b were originally interlinked.

F.13a: Copper alloy torc/bracelet
MSCC: (4P)T
BM: 1991,0501.182; Jackson no.: 155a/b
Fragment of copper alloy, possibly gilded, multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a crude ring. Stage II construction of four twisted wires plied together. Now in two parts.
Wt: 5.0g; D(nr): 3.7mm; D(wire): 1.4mm; L: 31.0mm

F.13b: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.182; Jackson no.: 155c
Fragment of gold/silver alloy multi-strand multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a rough double figure-of-eight shape. Stage II construction of two circular-section wires plied together.
Wt: 8.4g; D(nr): 2.4mm; D(wire): 1.3mm; L: 56.2mm

F.14a–b: Composite group (interlinked) (Pl. 14.20)
The neck-ring/body of torc/bracelet fragment F.14a passes through loop at the end of wire fragment F.14b.
Wt: 34.7g (total for F.14a–b)

F.14a: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.209; Jackson no.: 214a
Fragment of gold/silver alloy multi-strand torc or bracelet comprising one double-loop terminal (a continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied together. The whole fragment is curved into an oval loop.
D(nr): 5.5mm; D(wire): 2.6mm; D(term): 10.4mm; L: 79.1mm

F.14b: Copper alloy wire
BM: 1991,0702.9; Jackson no.: 214b
[Analysed: see Ch. 17]
Fragment of twisted copper alloy wire, broken at both ends (**Fig. 17.36**). Bent and distorted into an irregular shape with a loop at one end.
D(wire): 2.4mm; L: 39.5mm

F.15a–b: Composite group (interlinked) (Pl. 14.20)
Torc/bracelet fragments F.15a and F.15b are looped together.
Wt: 19.4g (total for F.15a–b)

F.15a: Copper alloy torc/bracelet
MSCC: (4P)T
BM: 1991,0702.137; Jackson no.: 257a
[Analysed: see Ch. 17]
Fragment of gilded copper alloy multi-strand torc or bracelet comprising one double-ring terminal and length of neck-ring/body, cut at the other end (see **Fig. 17.49**). Stage II construction of four twisted wires plied together. The terminal is a pair of circular-section loops, soldered together to form a single ring, which extends to form two pairs of square-section twisted wires. These two pairs form the four neck-ring strands. The terminal has been flattened and broken. The whole fragment has been bent into a ring with overlapping ends.
D(nr): 3.9mm; D(wire): 1.2mm; L: 53.5mm

F.15b: Copper alloy torc/bracelet
MSCC: (5C)T
BM: 1991,0702.138; Jackson no.: 257b
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, cut at one end and broken at the other. Stage II construction of five twisted wires coiled together. The whole fragment has been bent to form a crude ring.
D(nr): 5.2mm; D(wire): 1.6mm; L: 41.1mm

F.16a–b: Composite group (interlinked) (Pl. 14.20)
Torc/bracelet fragment F.16b is looped through the terminal of torc/bracelet fragment F.16a. They probably originally formed part of the same object.
Wt: 2.8g (total for F.16a–b)

F.16a: Copper alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0702.226; Jackson no.: 450a
Fragment of copper alloy multi-strand torc or bracelet, comprising one double-loop terminal (a continuous loop extending to form the two neck-ring/body wires), and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied loosely together.
D(nr): 3.0mm; D(wire): 1.3mm; D(term): 6.8mm; L: 18.5mm

F.16b: Copper alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0702.227; Jackson no.: 450b
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied loosely together. The fragment is bent into a ring with overlapping ends.
D(nr): 3.6mm; D(wire): 1.3mm; L: 20.8mm

F.17a–c: Composite group (interlinked) (Pl. 14.20)
Wire F.17b and torc/bracelet fragment F.17c are looped onto torc/bracelet fragment F.17a.
Wt: 7.5g (total for F.17a–c)

F.17a: Gold/silver alloy torc/bracelet
MSCC: (2P)Q
BM: 1991,0501.216; Jackson no.: 286a
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two lightly twisted square-section wires plied together, one wire extending further than the other. The fragment is bent into an irregular ring with overlapping ends.
D(nr): 2.2mm; D(wire): 1.5mm; L: 30.5mm

F.17b: Gold/silver alloy wire
BM: 1991,0702.8; Jackson no.: 286b
[Analysed: see Ch. 17]
Fragment of gold/silver alloy circular-section wire, broken at both ends, bent into an irregular penannular ring. This precious metal alloy also shows traces of mercury gilding (see **Fig. 17.51a**).
D(wire): 2.0mm; L: 27.5mm

F.17c: Gold/silver alloy torc/bracelet
BM: 1991,0501.217; Jackson no.: 286c
Double-loop terminal from gold/silver alloy multi-strand torc or bracelet, formed from a continuous length of circular-section wire.
D(wire): 1.3mm; D(term): 8.4mm; L: 11.8mm

F.18a–l: Composite group (interlinked) (Pl. 14.21)
Rings, wire and torc/bracelet fragments F.18a–l were originally linked together in a chain: a to b, b to c etc. The only exception is the small fragment of strip, F.18i, which was attached to the torc fragment F.18h.
Wt: 127.7g (total for F.18a–l)

F.18a: Gold/silver alloy wire
BM: 1991,0501.62; Jackson no.: 59a
Fragment of gold/silver alloy twisted wire, spiralled into a ring. Broken at both ends.
D(ext): 28.6mm; W: 14.1mm; T: 2.5mm

F.18b: Gold/silver alloy small ring
BM: 1991,0501.63; Jackson no.: 59b
Complete gold/silver alloy small ring with overlapping tapered and roughly-rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 25.7mm; W: 6.2mm; T: 2.8mm

F.18c: Gold/silver alloy small ring
BM: 1991,0501.64; Jackson no.: 59c
Gold/silver alloy small penannular ring made from a strip with squarish cross-section. One rounded and one cut end.
D(ext): 28.1mm; W: 5.1mm; T: 3.4mm

F.18d: Gold/silver alloy small ring
BM: 1991,0501.65; Jackson no.: 59d
Complete gold/silver alloy small ring with overlapping tapered, rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 27.4mm; W: 13.0mm; T: 1.8mm

F.18e: Gold/silver alloy small ring
BM: 1991,0501.66; Jackson no.: 59e
Gold/silver alloy small penannular ring made from a strip with thick, rectangular cross-section. One tapered and one cut end.
D(ext): 21.7mm; W: 8.1mm; T: 3mm

F.18f: Gold/silver alloy small ring
BM: 1991,0501.67; Jackson no.: 59f
Gold/silver alloy small spiral ring made from a strip with squarish cross-section. Roughly cut ends, slightly distorted form.
D(ext): 33.1mm; W: 15.1mm; T: 2.1mm

F.18g: Gold/silver alloy small ring
BM: 1991,0501.68; Jackson no.: 59g
Complete gold/silver alloy small spiral ring with tapered, rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 24.2mm; W: 12.6mm; T: 2.2mm

F.18h: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.69; Jackson no.: 59h
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising a single-loop terminal (a continuous loop extending to form the two neck-ring/body wires) and a length of neck-ring/body, cut at the other end. Stage II construction of two circular-section wires plied together. The fragment is bent into a ring with the cut ends of the wires overlapping with the terminal.
D(ext): 25.8mm; D(nr): 4.6mm; D(wire): 2.7mm; D(term): 13.9mm

F.18i: Gold/silver alloy strip
BM: 1991,0501.69.a; Jackson no.: 59h
Small fragment of gold/silver alloy strip with rectangular cross-section, folded in half.
Wt: 0.3g; L: 31.0mm; W: 4.0mm; T: 0.1mm

F.18j: Gold/silver alloy small ring
BM: 1991,0501.70; Jackson no.: 59i
Gold/silver alloy small spiral ring made from a strip with rectangular cross-section. Both ends cut.
D(ext): 30.4mm; W: 6.0mm; T: 2.3mm

F.18k: Gold/silver alloy small ring
BM: 1991,0501.71; Jackson no.: 59j
Complete gold/silver alloy small spiral ring made from a strip with rectangular cross-section. Tapered, rounded terminals.
D(ext): 28.3mm; W: 17.0mm; T: 2mm

F.18l: Gold/silver alloy small ring
BM: 1991,0501.72; Jackson no.: 59k
Complete gold/silver alloy small ring with overlapping tapered, rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 25.9mm; W: 10.2mm; T: 2.1mm

F.19a–b: Composite group (interlinked) (Pl. 14.21)
Ring F.19a and tubular torc fragment F.19b are interlinked. F.19b is looped over F.19a, with its ends hammered together to join the two.
Wt: 25.5g (total for F.19a–b)

F.19a: Gold/silver alloy large ring
BM: 1991,0501.160; Jackson no.: 96a
Complete gold/silver alloy large ring with overlapping tapered, rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 40.0mm; W: 7.9mm; T: 2mm

F.19b: Gold/silver alloy torc
TUBULAR (TYPE 4/5)
BM: 1991,0501.161; Jackson no.: 96b
[Analysed: see Ch. 17]
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, slightly tapered, with 'punch-textured' surface (see **Fig. 17.12a–c**). Broken at both ends and crushed flat.
L: 37.5mm; W: 24.9mm; T: 12.7mm

F.20a–b: Composite group (interlinked) (Pl. 14.21)
Ring F.20a and torc/bracelet fragment F.20b are interlinked.
Wt: 18.1g (total for F.20a–b)

F.20a: Gold/silver alloy large ring
BM: 1991,0702.29; Jackson no.: 128a
Gold/silver alloy large ring with overlapping terminals, made from a strip with rectangular cross-section. One rounded and one cut end.
D(ext): 46.4mm; W: 7.0mm; T: 1.9mm

F.20b: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0702.30; Jackson no.: 128b
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied together. The fragment is bent

F.18a-l
F.18f
F.18.g
F.18h
F.18l
F.18e
F.18j
F.18k
f.18d
F.18a
F.18b
F.18c
F.18i
F.19a-b
F.19a
F.19b
F.20a-b
F.20a
F.28b
F.21a-b
F.21a
F.21b
F.22a-b
F.22a
F.22b
F.23a-b
F.23b
F.23a
F.24a-b
F.24b
F.24a
F.25a-j
F.25a
F.25c
F.25e
F.25g
F.25i
F.25j
F.25b
F.25d
F.25f
F.25h
F.26a-e
F.26a
F.26e
F.26b
F.26d
F.26c
F.27a-b
F.27a
F.27b
F.28a-b
F.28b
F.28a
F.29a-c
F.29c
F.29a
F.29b
F.30a-b
F.30a
F.30b
0
5
10cm

Plate 14.21

into a teardrop shape, with overlapping ends.
D(nr): 3.5mm; D(wire): 1.6mm; L: 35.4mm

F.21a–b: Composite group (interlinked) (Pl. 14.21)
Ring F.21a and torc/bracelet fragment F.21b are interlinked.

F.21a: Gold/silver alloy small ring
BM: 1991,0501.206; Jackson no.: 204a
Gold/silver alloy small ring with overlapping tapered, rounded terminals. Made from a strip with rectangular cross-section. The shape of the ring in plan is slightly irregular, and one edge shows signs of hammering.
Wt: 13.0g; D(ext): 28.5mm; T: 2.3mm

F.21b: Gold/silver alloy torc/bracelet
MSCC: (2P(2P))R
BM: 1991,0501.207; Jackson no.: 204b
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body with Stage III construction, broken at both ends. The cable is formed from two ropes plied loosely together, each of which is made up of two circular-section wires which are themselves plied together. The short length of cable is bent into a rough ring with slightly overlapping ends.
Wt: 6.2g; D(nr): 6.3mm; D(rope): 2.5mm; D(wire): 1.1mm; L: 39.2mm

F.22a–b: Composite group (interlinked) (Pl. 14.21)
Torc/bracelet fragment F.22a and ring F.22b were originally interlinked.

F.22a: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.148; Jackson no.: 82a
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends. Stage II construction of two circular-section wires plied together. The fragment is bent into a rough oval shape, with the ends not quite overlapping.
Wt: 10.6g; D(nr): 3.6mm; D(wire): 1.7mm; L: 74.3mm

F.22b: Gold/silver alloy small ring/?torc
BM: 1991,0501.149; Jackson no.: 82b
Gold/silver alloy small ring, with flat terminals which overlap by almost half a turn. Made from circular-section wire. Possibly a double-loop terminal from a multi-strand torc.
Wt: 12.1g; D(ext): 27.3mm; D(wire): 4.0mm

F.23a–b: Composite group (interlinked) (Pl. 14.21)
Ring F.23a and torc/bracelet fragment F.23b are interlinked.
Wt: 13.4g (total for F.23a–b)

F.23a: Gold/silver alloy small ring
BM: 1991,0702.42; Jackson no.: 207a
Gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. Slightly tapered, cut ends.
D(ext): 32.3mm; W: 5.0mm; T: 0.9mm

F.23b: Copper alloy torc/bracelet
MSCC: (2P(2P))R
BM: 1991,0702.43; Jackson no.: 207b
Fragment of copper alloy, possibly gilded, multi-strand torc neck-ring or bracelet body with Stage III construction, broken at both ends. The cable is formed from two ropes plied together, each of which is made up of two circular-section wires which are themselves plied together. Bent into a rough ring, with slightly overlapping ends.
D(ext): 30.7mm; D(nr): 6.3mm; D(rope): 2.2mm; D(wire): 1.1mm

F.24a–b: Composite group (interlinked) (Pl. 14.21)
Torc/bracelet fragment F.24a and ring F.24b are interlinked.
Wt: 29.0g (total for F.24a–b)

F.24a: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.130; Jackson no.: 20b
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising a single-loop terminal (a continuous loop extending to form the two neck-ring/body wires) and a length of neck-ring/body, cut at the other end. Stage II construction of two circular-section wires plied loosely together. The fragment is bent into a ring, with the cut end just slightly passing through the loop terminal.
D(ext): 38.0mm; D(nr): 6.1mm; D(wire): 2.8mm; D(term): 12.9mm

F.24b: Gold/silver alloy small ring
BM: 1991,0501.131; Jackson no.: 20a
Gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. One slightly tapered and one cut end (possibly a recent break).
D(ext): 30.0mm; W: 5.0mm; T: 1.3mm

F.25a–j: Composite group (interlinked) (Pl. 14.21)
Rings F.25a–j are linked together in a chain: a to b, b to c etc (**Fig. 23.2**).
Wt: 127.1g (total for F.25a–j)

F.25a: Gold/silver alloy small ring
BM: 1991,0501.14.a; Jackson no.: 5a
Complete gold/silver alloy small ring with overlapping rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 24.4mm; W: 11.8mm; T: 2.4mm

F.25b: Gold/silver alloy small ring
BM: 1991,0501.14.b; Jackson no.: 5b
Gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. One slightly tapered and one broken end.
D(ext): 25.5mm; W: 10.1mm; T: 2.2mm

F.25c: Gold/silver alloy small ring
BM: 1991,0501.14.c; Jackson no.: 5c
Complete gold/silver alloy small spiral ring made from a strip

with rectangular cross-section. Slightly rounded terminals.
D(ext): 24.5mm; W: 15.5mm; T: 1.5mm

F.25d: Gold/silver alloy small ring
BM: 1991,0501.14.d; Jackson no.: 5d
Gold/silver alloy small spiral ring made from a strip with rectangular cross-section. One slightly rounded and one broken terminal.
D(ext): 25.8mm; W: 14.6mm; T: 2.7mm

F.25e: Gold/silver alloy small ring
BM: 1991,0501.14.e; Jackson no.: 5e
Gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. One tapered and one cut end.
D(ext): 29.7mm; W: 9.2mm; T: 2.0mm

F.25f: Gold/silver alloy small ring
BM: 1991,0501.14.f; Jackson no.: 5f
Complete gold/silver alloy small ring with overlapping slightly rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 26.5mm; W: 12.5mm; T: 2.0mm

F.25g: Gold/silver alloy small ring
BM: 1991,0501.14.g; Jackson no.: 5g
Gold/silver alloy small ring with overlapping terminals, made from a strip with rectangular cross-section. One tapered and one cut end.
D(ext): 30.8mm; W: 13.2mm; T: 2.8mm

F.25h: Gold/silver alloy small ring
BM: 1991,0501.14.h; Jackson no.: 5h
Complete gold/silver alloy small penannular ring made from a strip with rectangular cross-section. Complete, slightly rounded terminals.
D(ext): 30.7mm; W: 13.3mm; T: 2.4mm

F.25i: Gold/silver alloy small ring
BM: 1991,0501.14.i; Jackson no.: 5i
Complete gold/silver alloy small penannular ring made from a strip with rectangular cross-section. Slightly rounded terminals.
D(ext): 21.4mm; W: 6.5mm; T: 1.7mm

F.25j: Gold/silver alloy small ring
BM: 1991,0501.14.j; Jackson no.: 5j
Complete gold/silver alloy small spiral ring made from a strip with rectangular cross-section. Tapering terminals.
D(ext): 29.9mm; W: 8.6mm; T: 2.0mm

F.26a–e: Composite group (interlinked) (Pl. 14.21)
Rings F.26a–e are an interlinked group. F.26b, F.26c and F.26d are interlinked with F.26a. F.26e is interlinked with F.26d.
Wt: 53.9g (total for F.26a–e)

F.26a: Gold/silver alloy large ring
BM: 1991,0501.140; Jackson no.: 58a
Complete gold/silver alloy large ring with overlapping tapered, slightly rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 35.5mm; W: 13.0mm; T: 1.4mm

F.26b: Gold/silver alloy small ring
BM: 1991,0501.141; Jackson no.: 58b
Gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. One uneven and one cut end.
D(ext): 30.9mm; W: 10.8mm; T: 1.7mm

F.26c: Gold/silver alloy small ring
BM: 1991,0501.142; Jackson no.: 58c
Gold/silver alloy small ring with abutted terminals. Made from a strip with rectangular cross-section. One tapered, rounded terminal and one cut end.
D(ext): 24.4mm; W: 9.0mm; T: 2.0mm

F.26d: Gold/silver alloy small ring
BM: 1991,0501.143; Jackson no.: 58d
Complete gold/silver alloy small ring with overlapping tapered, slightly rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 29.7mm; W: 9.2mm; T: 1.6mm

F.26e: Gold/silver alloy small ring
BM: 1991,0702.7; Jackson no.: 58e
Complete gold/silver alloy small ring with overlapping tapered, roughly rounded terminals. Made from a strip with rectangular cross-section.
D(ext): 25.5mm; W: 10.6mm; T: 1.8mm

F.27a–b: Composite group (interlinked) (Pl. 14.21)
Rings F.27a and F.27b are interlinked.
Wt: 19.9g (total for F.27a–b)

F.27a: Gold/silver alloy small ring
BM: 1991,0501.139; Jackson no.: 51a
Gold/silver alloy small ring with abutted terminals, made from a strip with rectangular cross-section. Tapered ends, one rounded and one cut.
D(ext): 21.3mm; W: 11.2mm; T: 2.3mm

F.27b: Gold/silver alloy small ring
BM: 1991,0702.22; Jackson no.: 51b
Gold/silver alloy small spiral ring made from a strip with rectangular cross-section. One tapered, rounded terminal and one broad cut end.
D(ext): 25.3mm; W: 6.6mm; T: 2.5mm

F.28a–b: Composite group (interlinked) (Pl. 14.21)
Rings F.28a and F.28b are interlinked.
Wt: 22.5g (total for F.28a–b)

F.28a: Gold/silver alloy small ring
BM: 1991,0501.167; Jackson no.: 129a
Gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. One rounded and one cut end.
D(ext): 29.5mm; W: 6.0mm; T: 1.6mm

F.28b: Gold/silver alloy large ring
BM: 1991,0501.168; Jackson no.: 129b
Gold/silver alloy large ring with flat, abutted terminals. Made from a strip with square cross-section.
D(ext): 40.7mm; W: 3.1mm; T: 2.4mm

F.29a–c: Composite group (inserted) (Pl. 14.21)
Torc/bracelet fragment F.29b and wire fragment F.29c are inserted into either end of tubular torc fragment F.29a.
Wt: 33.4g (total for F.29a–c)

F.29a: Gold/silver alloy torc
TUBULAR (TYPE 4/5)
BM: 1991,0501.135; Jackson no.: 25
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, cut at both ends, flattened and bent. It has been hammered flat at the cut ends after the insertion of torc/wire fragments F.29b and c. The surface is covered in punched 'stipple' decoration.
Perhaps part of the same object as F.56.
L: 91.0mm; W: 19.8mm

F.29b: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0501.135; Jackson no.: 25
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, partly contained within F.29a, cut at visible end. Stage II construction of two circular-section wires plied together.
D(nr): 3.6mm; D(wire): 2.0mm

F.29c: Gold/silver alloy wire
BM: 1991,0501.135; Jackson no.: 25
Fragment of bent circular-section gold/silver alloy wire, partly contained within F.29a, cut at visible end.
D(wire): 1.5mm

F.30a–b: Composite group (inserted) (Pl. 14.21)
Wire/torc fragment F.30b is inserted into the broken end of the neck-ring of tubular torc fragment F.30a.
Wt: 82.0g (total for F.30a–b)

F.30a: Gold/silver alloy torc
TUBULAR (TYPE 4)
BM: 1991,0501.90; Jackson no.: 101
Fragment of gold/silver alloy Type 4 tubular torc comprising one flat, expanded buffer terminal and part of the plain, tapered neck-ring, cut at the other end. The inner face of the neck-ring has been hammered flat to hold in place inserted wire F.30b. The terminal has a plain, concave end-plate with small central hole, fused slightly unevenly to the tube end.
D(term): 15.5mm; L: 104.7mm

F.30b: Gold/silver alloy wire/?torc
BM: 1991,0501.90; Jackson no.: 101
Fragment of gold/silver alloy circular-section wire, possibly from a simple torc neck-ring. Partly contained within F.30a, broken at visible end.
D(wire): 5.3mm

F.31a–b: Composite group (inserted) (Pl. 14.22)
Tubular torc fragment F.31b was found inside crushed tubular torc fragment F.31a. A hole has been roughly punched through the terminal of F.31a, suggesting that this fragment was once part of (or intended to be part of) an interlinked group.

F.31a: Gold/silver alloy torc
TUBULAR (TYPE 5)
BM: 1991,0501.28; Jackson no.: 33
Fragment of gold/silver alloy Type 5 tubular torc, comprising buffer terminal and part of the neck-ring, formed of thin sheet (see **Fig. 21.36**). Flattened, torn, and badly distorted. The neck-ring is ornamented with decoration organised into rectangular, triangular and diamond-shaped zones, defined by parallel lines and chevrons. Various zones contain inscribed motifs including concentric circles but also curvilinear fin motifs. Backgrounds also differ and include dimples, regular dots and plain areas. The flat(ish) terminal is decorated in a different style. The overall pattern forms a rough lyre-shape with an opposing pair of swirls flanked by an arrangement of fin motifs and tendrils. The motifs are plain, and the background is stippled. Of note are the tendrils at each end of the pattern. A part-melted, coalesced mass of gold, incorporating gold/silver alloy twisted wire fragments, is fused to the end of the terminal. See Chapter 16 for details of the conservation process, and Chapter 21 for a full discussion of decoration.
Wt: 63.4g; D(term): 60.2mm; L: 107.8mm

F.31b: Gold/silver alloy torc
TUBULAR (TYPE 1)
BM: 1991,0501.28.a
Fragment of gold/silver alloy tubular torc neck-ring, probably from a Type 1 torc, cut or torn at both ends, and crushed flat at one end. Decorated with zig-zag lines of punched decoration running along the neck-ring, which delimit diamond-shaped zones (see Ch. 21 for discussion of decoration).
Wt: 4.9g; D(nr): 8.8mm; L: 60.3mm

F.32: Composite group (fused): Gold/silver alloy torc; torc/bracelet (Pl. 14.22)
TUBULAR (TYPE 4/5); MSCC: (2P)R
BM: 1991,0501.136; Jackson no.: 26
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, distorted, and torn at both ends (see **Fig. 23.1**). Decorated with rows of punched dots, running parallel along the neck-ring (see **Fig. 21.6**). Several fragments are fused onto the middle of the tubular piece, including a part-melted fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body (with Stage II construction of two circular-section wires plied together), and globules of melted gold/silver alloy.
Wt: 24.2g; L: 63.2mm; W: 11.8mm

F.33: Composite group (fused): Gold/silver alloy torc; strip/ ?small/large ring; wire (Pl. 14.22)
TUBULAR (TYPE 1)
BM: 1991,0501.165; Jackson no.: 102

F.31a-b

F.31a

F.31b

F.32

F.33

F.34

F.35

F.36

F.37

F.38

F.39

0 5 10cm

Plate 14.22

Fragment of gold/silver alloy strip (likely part of an uncoiled large/small ring), partially melted at both ends, fused to a fragment of gold/silver alloy narrow tubular torc neck-ring, probably from a Type 1 torc, broken/cut at both ends. The tubular torc fragment is decorated with punched 'stipple' texture. Other part-melted gold/silver alloy fragments also adhere to one end of the broken tubular torc, including a small piece of slender twisted wire.
Wt: 53.7g; L: 109.7mm (strip); 64.4mm (tubular torc fragment); W: 9.1mm (strip); 8.5mm (tubular torc fragment); T: 1.4mm (strip)

F.34: Composite group (fused): Gold/silver alloy torc/bracelet; wire; sheet (Pl. 14.22)
MSCC: (6C(2P))R
BM: 1991,0501.16; Jackson no.: 7
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body of Stage III construction, cut or broken at both ends. The cable is formed from six coiled ropes, each of which is made up of two plied circular-section wires. The whole fragment is bent and distorted, and near one end is a fused gold/silver alloy mass of plain and twisted wire fragments and sheet (see **Fig. 20.27**).
Wt: 58.4g; D(nr): 8.0mm; D(rope): 2.8mm; D(wire): 1.4mm; L: 79.0mm

F.35: Composite group (fused): Gold/silver alloy torc; wire (Pl. 14.22)
TUBULAR (TYPE 3)
BM: 1991,0501.21; Jackson no.: 13
[Analysed: see Ch. 17]
Large gold/silver alloy buffer terminal from Type 3 tubular torc, broken off at the neck-ring. Flat face with raised outer rim, textured with tool marks. On the reverse, a raised concentric ring divides this outer edge of the buffer terminal from the start of the neck-ring. A cluster of part-melted, fine, twisted gold/silver alloy wire fragments is fused to one side of the rim, and gold droplets are fused in several other places.
Similar, although not the pair, to F.2g, F.47 and F.48.
Wt: 52.3g; D(term): 57.8mm; L: 31.5mm

F.36: Composite group (fused): Gold/silver alloy torc/bracelet; ?wire (Pl. 14.22)
MSCC: (2P)TZ
BM: 1991,0501.23; Jackson no.: 18
Fragment of gold/silver alloy multi-strand torc/bracelet comprising one thickened ring terminal (continuous with the neck-ring/body wires) and length of neck-ring/body, broken at the other end. Stage II construction of two Z-twisted wires plied together. The whole fragment is bent, distorted, and part melted, and in the centre is a fused mass of gold/silver alloy droplets and ?wire.
Wt: 72.3g; D(nr): 12.2mm; D(wire): 5.1mm; D(term): 20.9mm; L: 81.5mm

F.37: Composite group (fused): Gold/silver alloy torc/bracelet; sheet (Pl. 14.22)
MSCC: (2P)R
BM: 1991,0501.24; Jackson no.: 19
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends, at different lengths along each wire. Stage II construction of two circular-section wires plied together. The whole fragment is bent, distorted, and part melted. Fragments of gold/silver alloy sheet are fused to both ends.
Wt: 111.7g; D(nr): 8.8mm; D(wire): 4.3mm; L: 121.8mm

F.38: Composite group (fused): Gold/silver alloy torc/bracelet; ?wire (Pl. 14.22)
MSCC: (4C)T
BM: 1991,0501.43; Jackson no.: 48
Fragment of gold/silver alloy multi-strand torc/bracelet comprising one cage terminal and a length of neck-ring/body, with each wire broken at a different point. Stage II construction of four twisted wires coiled together. The cage terminal consists of a continuous length of circular-section wire, forming three involuted loops. This extends into two pairs of wires which form the neck-ring/body. The whole fragment is bent, distorted, and part melted, and in the centre is a fused mass of gold/silver alloy droplets and ?wire.
Wt: 30.2g; D(nr): 5.2mm; D(wire): 1.7mm; D(term): 16.3mm; L: 78.0mm

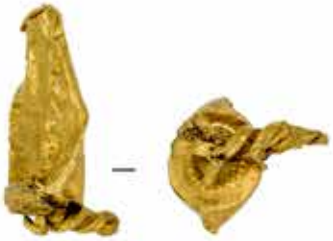
F.39: Composite group (fused): Gold/silver alloy torc; wire (Pl. 14.22)
MSCC: (3P)T
BM: 1991,0501.44; Jackson no.: 50
Fragment of gold/silver alloy multi-strand torc comprising most of the neck-ring and parts of both terminals, although pulled open so as to be almost straight. The Stage II construction of three twisted wires plied together. The more complete terminal consists of a single continuous circular-section loop which extends to form one of the neck-ring wires, probably originally part of a double- or triple-loop terminal. The other terminal is represented only by the broken neck of one loop. The neck-ring is bent, distorted, and part melted, two of the wires are incomplete, one having broken at the site of a possible casting flaw. Small globules of gold and twisted wire fragments are fused to the torc in several places.
Wt: 72.7g; D(nr): 8.3mm; D(wire): 3.6mm; D(term): 13.9mm; L: 204.0mm

F.40: Composite group (fused): Gold/silver alloy torc/bracelet; wire (Pl. 14.23)
MSCC: (2P)R
BM: 1991,0501.52; Jackson no.: 54
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc/bracelet comprising one ring terminal (continuous with the neck-ring/body wires) and part of the neck-ring/body. Stage II construction of two circular-section wires plied together. The neck-ring/body is severely bent and distorted, with the wires pulled apart and melted at the broken end. Fragments of twisted and circular-section gold alloy wire are fused to the neck-ring in several places (see **Figs 17.2, 20.25**).
Wt: 373.7g; D(wire): 5.6mm; D(term): 36.7mm; L: 180.0mm

F.40

F.41

F.42



F.43

F.44

F.45

F.46

0 5 10cm

Plate 14.23

F.41: Composite group (fused): Gold/silver alloy torc (Pl. 14.23)
MSCC: (3P)R
BM: 1991,0501.78; Jackson no.: 66
Fragment of gold/silver alloy multi-strand torc neck-ring, coiled into a rough ring. Stage II construction of three circular-section wires plied together. One end is broken, distorted and part melted. The other end may be a simple form of buffer terminal: the lightly expanded flat ends of the three wires are fused together into a triple-lobed 'cap'. The wires are broken or partially melted in several places and a semi-coalesced strand of narrow twisted gold wire is fused to one of them near the broken end.
Wt: 116.2g; D(ext): 72.4mm; D(nr): 7.1mm; D(wire): 3.8mm

F.42: Composite group (fused): Gold/silver alloy torc (Pl. 14.23)
TUBULAR (TYPE 4); MSCC: (2P)Q
BM: 1991,0501.96; Jackson no.: 108
Fragment of a gold/silver alloy Type 4 tubular torc comprising flat buffer terminal and part of the lightly tapering neck-ring, torn at the other end (see **Figs 20.26**, **21.5**). The neck-ring has three crimped 'pie-crust' seams running parallel along its length, and a punch-textured or stippled surface. The expanded terminal has a round end-plate with a repoussé circular 'segmented wreath' motif. The object is badly crushed and distorted, especially at the broken end. Fragments of semi-coalesced metal fused to the end of the terminal include a section of Stage II multi-strand torc/bracelet neck-ring/body made up of two square-section gold/silver alloy wires twisted together, broken at both ends.
Wt: 35.8g; D(wire): 3.2mm; D(term): 24.5mm; L: 70.5 (total); 62.60mm (tubular torc fragment); 31.40mm (twisted wires)

F.43: Composite group (fused): Gold/silver alloy torc/bracelet; gold/silver alloy wire; gold/silver alloy sheet (Pl. 14.23)
TUBULAR (TYPE 5); MSCC: (2P)T
BM: 1991,0501.29; Jackson no.: 34
Fragment of decorated gold/silver alloy Type 5 tubular torc, comprising one damaged buffer terminal and part of the neck-ring (see **Figs 16.5–6**, **21.37**). The convex face of the terminal face is surrounded by a raised, rounded rim. Behind this, the tubular body narrows to form a tapering neck-ring, which is torn at the other end. When discovered the fragment was badly distorted, crushed and torn; shape now restored. It is elaborately decorated with decoration extending across the terminal and much of the neck-ring, comprising embossed curvilinear motifs on a punch-textured background. The torc was fabricated from several individual components. The face of the terminal is damaged, with some of the sheet missing, creating a hole. Part-melted material is fused on in this area, including fragments of gold/silver alloy sheet with embossed decoration (perhaps part of a tubular torc or bracelet), and the ring terminal of a multi-strand gold/silver alloy torc with Stage II neck-ring formed from two twisted wires plied together. Other gold/silver alloy wire and sheet fragments, as well as amorphous droplets, adhere to other areas. See Chapter 16 for details of the conservation process, and Chapter 21 for a full discussion of decoration. A hole has been roughly punched through the neck-ring near the broken end, suggesting that this fragment was once part of (or intended to be part of) an interlinked group. F.241 was found inside during conservation.
Wt: 119.1g; D(term): 63.2mm; L: 163.0mm

F.44: Composite group (fused): Copper alloy torc/bracelet (Pl. 14.23)
MSCC: (2PZ)R
BM: 1991,0407.46; Site code: SN/AJ
Context details: Hoard F pit; Excavated find, at edge of hoard pit.
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, cut or broken at both ends. Stage II construction of two circular-section wires plied together Z-twist. Damaged and part melted, with small adhering fragments of gold twisted wire.
Wt: 0.9g; D(nr): 3.8mm; D(wire): 2.4mm; L: 23.5mm

F.45: Gold/silver alloy torc (Pl. 14.23)
TUBULAR (TYPE 4)
BM: 1991,0501.91; Jackson no.: 103
Fragment of gold/silver alloy Type 4 tubular torc, comprising a short section of hollow neck-ring, torn at one end, with buffer terminal at the other. The expanded terminal has a dished, circular end-plate, pierced by a small hole, a little off-centre. The surface of the neck-ring is textured with linear tool or punch-marks.
Wt: 33.0g; D(term): 18.3mm; L: 77.8mm

F.46: Gold/silver alloy torc (Pl. 14.23)
TUBULAR (TYPE 4)
BM: 1991,0501.98; Jackson no.: 110
Fragment of gold/silver alloy Type 4 tubular torc, comprising one terminal and a short length of tubular neck-ring, crushed and distorted (see **Fig. 21.24**). The neck-ring expands towards the flat trefoil-shaped buffer terminal, the end-plate of which is decorated with a repoussé circular 'segmented wreath' motif. Within the wreath is a repoussé four-armed star, creating four semi-circular arcs within the negative space inside the circular 'wreath'. These arcs are picked out with simple dot-punched stippled decoration. The neck-ring also has a punch-textured surface, and the broken end is very ragged. See Chapter 21 for a full discussion of decoration.
Wt: 27.7g; D(term): 34.4mm; L: 61.0mm

F.47: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 3)
BM: 1991,0501.20; Jackson no.: 12
Gold/silver alloy buffer terminal from Type 3 tubular torc, broken at start of neck-ring, with remains of sandy or organic infill visible at the break. The terminal has a flat centre with raised outer rim. Behind the terminal, the neck-ring widens into a bead with concentric rim. The external circumference of both the terminal and bead are decorated with stippling. A hole has been roughly punched through one side of the terminal, perhaps suggesting that it was

F.47

F.48

F.49

F.50

F.51

F.52

F.53

F.54

F.55

F.56

F.57

F.58

F.59

F.60

0 5 10cm

Plate 14.24

originally part of an interlinked group.
Similar, although not the pair, to F.2g and F.35. Possibly the pair to F.48.
Wt: 49.0g; D(term): 47.2mm; L: 62.2mm

F.48: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 3)
BM: 1991,0501.27; Jackson no.: 32
[Analysed: see Ch. 17]
Gold/silver alloy buffer terminal from Type 3 tubular torc, broken at start of neck-ring, with remains of sandy or organic infill visible at the break (see **Figs 17.7a, 17.8a–b, 17.13**). The terminal has a dished centre, indented and damaged, with raised outer rim. Behind the terminal the neck-ring widens into a bead with concentric rim. The external circumference of both the terminal and bead are decorated with stippling. This decoration is heavily worn. A hole punched roughly through the end of the terminal perhaps suggests that it was originally part of an interlinked group.
Similar, although not the pair, to F.2g and F.35. Possibly the pair to F.47.
Wt: 50.5g; D(term): 48.6mm; L: 44.5mm

F.49: Gold/silver alloy torc (Pl. 14.24)
TUBULAR
BM: 1991,0501.138; Jackson no.: 35
[Analysed: see Ch. 17]
Gold/silver alloy sheet ring, almost certainly the crushed and distorted buffer terminal section of a tubular torc, with the centre torn out.
Wt: 19.1g; D(ext): 60.2mm; T: 12.0mm

F.50: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 4/5)
BM: 1991,0501.208; Jackson no.: 209
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, torn at both ends and hammered flat. The surface is decorated with broadly-spaced stippling or punch-marks.
Wt: 6.0g; L: 32.1mm; W: 13.3mm; T: 2.0mm

F.51: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 4/5)
BM: 1991,0501.34; Jackson no.: 40
[Analysed: see Ch. 17]
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, broken or torn at both ends and flattened (see **Fig. 17.11**). Although badly crushed and distorted, punch-texture stippling is visible on the surface.
Wt: 14.5g; D(nr): 28.5mm; L: 73.8mm

F.52: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 4/5)
BM: 1991,0501.76; Jackson no.: 64
[Analysed: see Ch. 17]
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, broken or torn at both ends (see **Fig. 20.23**). The surface is decorated with punch-textured stippling. The fragment has been flattened and folded/rolled up on itself, and there are at least two roughly made small holes in the gold sheet (though these do not pierce all the way through the object). Other similar pieces have been folded around e.g. a small ring.
Wt: 18.0g; L: 31.7mm; W: 25.7mm; T: 10.1mm

F.53: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 4/5)
BM: 1991,0501.118; Jackson no.: 307
[Analysed: see Ch. 17]
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, broken or torn at both ends (see **Fig. 21.4**). When discovered it was pinched and hammered closed at both ends, though subsequently opened at one end by the finder. Elaborately decorated with punched and chased designs; zones of decoration are separated by simple double-grooved lines. One zone is quite simple, with punch-texture/stippling and a line of small, untextured triangles. Another is divided into diamond and triangular-shaped panels within which decorative motifs include concentric circles, crescents and punch-texturing. See Chapter 21 for a full discussion of decoration.
Contained five gold coins (Cat. nos 174–8).
Wt: 23.6g; L: 66.9mm; W: 18.7mm

F.54: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 4/5)
BM: 1991,0501.31; Jackson no.: 37
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, broken or torn at both ends. Decorated with impressed lines, which delimit zones of punch-texture/stippling (see **Fig. 21.3**).
Similar to F.55, though not a joining piece.
Wt: 11.1g; L: 60.0mm

F.55: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 4/5)
BM: 1991,0501.32; Jackson no.: 38
[Analysed: see Ch. 17]
Fragment of gold/silver alloy Type 4 or 5 tubular torc neck-ring, broken or torn at both ends. Decorated with impressed lines, creating a spiral design or mock-twist, alternating plain and punch-textured/stippled zones (see Ch. 21 for discussion of decoration).
Similar to F.54, though not a joining piece.
Wt: 13.1g; D(nr): 13.9mm; L: 72.6mm

F.56: Composite group (inserted): Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 4/5)
BM: 1991,0501.97; Jackson no.: 109
Two fragments of gold/silver alloy Type 4 or 5 tubular torc neck-ring: one inserted into the other, though most likely from the same object. Both are crushed and hammered flat. Punch-textured decoration; an impressed line/groove appears to slowly spiral around the neck-ring.
Perhaps part of the same object as F.29a.
Wt: 39.4g; L: 79.4mm; W: 17.8mm

F.57: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 1)
BM: 1991,0501.119; Jackson no.: 30

Plate 14.25

Fragment of gold/silver alloy Type 1 tubular torc, comprising a buffer terminal and length of neck-ring, cut or broken at the other end (see **Fig. 21.23**). The terminal has a 'pie-crust' crimped rim moulding around the circumference on the front, and the dished face has a central circular design of a triskele in relief against a stippled/punch-textured background. See Chapter 21 for a full discussion of decoration.
Wt: 42.5g; D(term): 34.0mm; L: 47.0mm

F.58: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 1)
BM: 1991,0501.25; Jackson no.: 29
Fragment of gold/silver alloy Type 1 tubular torc, comprising a buffer terminal and length of neck-ring, cut or broken at the other end. The terminal has a dished face and back, with simple raised circular rim around front and back circumference. The broken neck-ring has been hammered and bent. The neck-ring has clearly been constructed from a rolled length of sheet, and the seam is visible along one side.
Wt: 34.7g; D(nr): 8.5mm; D(term): 34.6mm; L: 51.5mm

F.59: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 1)
BM: 1991,0501.77; Jackson no.: 65
Fragment of gold/silver alloy Type 1 tubular torc, comprising a buffer terminal and length of neck-ring, roughly broken at the other end. The terminal is plain apart from simple rim moulding around the circumference on the front, and is slightly crushed, dented and distorted. The neck-ring is also distorted and hammered out of shape.
Wt: 48.0g; D(nr): 8.6mm; D(term): 37.9mm; L: 118.1mm

F.60: Gold/silver alloy torc (Pl. 14.24)
TUBULAR (TYPE 3)
BM: 1991,0501.26; Jackson no.: 31
Fragment of gold/silver alloy Type 3 tubular torc, comprising one terminal and a short length of tubular neck-ring, the whole severely crushed and distorted. The terminal is plain, with simple raised circular rim around front and back circumference. The neck-ring expands into a bead behind the terminal, with the same raised rim moulding. A hole punched through the edge of the terminal perhaps suggests that it was originally part of an interlinked group.
Wt: 60.4g; D(term): 49.1mm; L: 79.5mm

F.61: Gold/silver alloy torc (Pl. 14.25)
TUBULAR (TYPE 4)
BM: 1991,0501.164; Jackson no.: 100
Fragment of gold/silver alloy Type 4 tubular torc comprising a short section of hollow neck-ring, broken and slightly distorted at one end, expanding towards a buffer terminal at the other. The terminal has a dished, circular end-plate.
Wt: 19.5g; D(term): 12.0mm; L: 85.0mm

F.62: Composite group (fused): Gold/silver alloy torc; gold/silver alloy wire (Pl. 14.25)
TUBULAR (?TYPE 3);
BM: 1991,0501.30; Jackson no.: 36
[Analysed: see Ch. 17]
Fragment of gold/silver alloy tubular torc neck-ring, cut at one end, and expanding at the other towards the (missing) terminal (see **Fig. 17.7b**). At the terminal end, the fragment ends in an open trumpet-shape, with the edge being a rolled rim that probably marked the start of the buffer terminal, possibly a Type 3 form. In the interior at this end, a seam is visible around the circumference, showing that the flared terminal end was formed from a separate sheet component to the neck-ring. The fragment is partially crushed and distorted, and a short cut length of gold/silver alloy circular-section wire is fused to the broken end of the neck-ring.
Wt: 29.9g; L: 95.0mm

F.63–6: Gold/silver alloy and iron torc (Pl. 14.25)
TUBULAR (TYPE 2)
F.63–6 most likely represent a single torc, broken and incomplete. The T-shaped fastener of F.64 fits into the slot on F.63.

F.63: BM: 1991,0501.33; Jackson no.: 39
Fragment of gold/silver alloy Type 2 tubular torc, comprising a hollow double buffer terminal, which would have fastened to the narrow neck-ring by means of a central rectangular slot. Each terminal is a simple flat disc. The perimeter of each is badly dented, and the circular aperture in each outer face is torn. A packing material, possibly resin or beeswax, survives inside both terminals.
Wt: 14.2g; D(term): 29.8mm; T: 17.5mm

F.64: BM: 1991,0501.35; Jackson no.: 41
Fragment of gold/silver alloy Type 2 tubular torc neck-ring. One end terminates in a plate with a T-shaped projection/fastening. The other end is broken, revealing an iron core. Iron corrosion has burst through the gold sheet in places along the neck-ring. The surface is dented and hammered.
Wt: 17.2g; D(nr): 9.2mm; L: 94.3mm

F.65: BM: 1991,0501.36; Jackson no.: 42
[Analysed: see Ch. 17]
Fragment of gold/silver alloy Type 2 tubular torc neck-ring with degraded iron core visible inside. One end has a narrow gold collar soldered around the circumference of the neck-ring just behind the rim, with one neat and four rougher small circular holes beyond it. The other end also appears to be the original end of a section of neck-ring, but is more heavily damaged, with the sheet being torn. The surface is dented and hammered.
Wt: 9.3g; D(nr): 9.4mm; L: 71.4mm

F.66: BM: 1991,0501.134; Jackson no.: 24
Fragment of gold/silver alloy Type 2 tubular torc section of neck-ring with degraded iron core visible inside. One end has a narrow gold collar soldered around the circumference of the neck-ring just behind the rim, perhaps the end of a section of sheet forming the neck-ring. The other end is broken and partly crushed. The surface is dented and hammered.
May be part of the same torc as F.63–5.
Wt: 11.6g; D(nr): 9.0mm; L: 82.0mm

F.75

F.76

F.77

F.78

F.79

F.80

F.81

F.82

F.83

F.84

F.85

F.86

F.87

F.88

F.89

0 5 10cm

Plate 14.26

F.67: Gold/silver alloy strip/?torc (Pl. 14.25)
BM: 1991,0501.132; Jackson no.: 21
Gold/silver alloy strip with rectangular cross-section, distorted as if it has been tightly coiled or twisted and then flattened. Rolled into a small loop at one end, broken at the other. Possibly originally part of a ribbon torc.
Wt: 17.0g; L: 111.3mm; W: 10.6mm; T: 1.0mm

F.68: Gold/silver alloy torc (Pl. 14.25)
BM: 1991,0702.46; Jackson no.: 208
Fragment of gold/silver alloy multi-strand torc comprising around half of a ring terminal. Broken in antiquity, and flattened by hammering to give the terminal a squarish section. Broken across the centre of the ring, revealing a small squarish void in the core. One side is plain, the other most likely has some kind of simple, linear cast decoration, the design of which is obscured by corrosion products.
Wt: 21.7g; D(wire): 8.7mm; L: 38.3mm

F.69: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.25)
BM: 1991,0702.47; Jackson no.: 308
Fragment of curved gold/silver alloy circular-section wire, cut at both ends. Most likely part of a loop terminal from a multi-strand torc/bracelet.
Wt: 3.8g; D(wire): 6.5mm; L: 19.6mm

F.70: Gold/silver alloy torc/bracelet (Pl. 14.25)
BM: 1991,0501.212; Jackson no.: 218
Loop terminal from a gold/silver alloy multi-strand torc or bracelet, formed from circular-section wire. The terminal is cut or broken at both ends, so it may once have been part of a double-loop terminal.
Wt: 14.4g; D(wire): 5.4mm; D(term): 27.5mm

F.71: Gold/silver alloy torc (Pl. 14.25)
BM: 1991,0501.183; Jackson no.: 156
Fragment of buffer terminal from gold/silver alloy multi-strand torc, comprising approximately half of the flat plain cast 'cap', broken down the middle to leave a semi-circular fragment. Two parallel cordons run around the edge circumference. On the reverse, small fragments of melted wire are visible, but it is not possible to discern the neck-ring construction.
Wt: 4.8g; L: 25.1mm; W: 10.9mm; T: 5.4mm

F.72: Gold/silver alloy torc (Pl. 14.25)
BM: 1991,0501.45; Jackson no.: 52
[Analysed: see Ch. 17]
Detached torus terminal from a gold/silver alloy multi-strand torc (see **Figs 17.100c–d, 21.31**). Very thin sheet, with elaborate relief decoration of curvilinear motifs set in a stippled/punch-decorated field, some suggestive of zoomorphic or anthropomorphic forms. The sheet is split along a join within the eye of the terminal, and there is dented and torn damage in several places. Small gold/silver alloy sheet fragments and semi-coalesced globules adhere in several places. See Chapter 17 for information on construction, and Chapter 21 for a full discussion of decoration.

Notes from scientific analysis (Nigel Meeks)
This is an individual terminal, hollow with thin walls. There are no broken wires attached to the terminal flange where it has broken away from the neck-ring. It has a deep relief design that appears to be chased into the metal, with features outlined with additional chased lines and circumferential chased lines at the edge of the central hole, similar to torc L.19a. The recessed areas between the main design features are covered in a dot-punched decoration to give texture to these areas. This is in contrast to torc terminals that have cast-in deep relief decoration, such as L.21a, in which the recessed areas are left plain and smooth. Looking inside the open terminal shows the thin nature of the metal and the relief decoration clearly shows as a negative impression in the metal from within, having been chased from the outside. This would not be the case if it had been cast. It would not be possible to produce the complex hollow doughnut form by raising the sheet terminal in one piece. A small linear slot, which looks like part of a lateral seam, is seen on the side of the terminal. This may be evidence of a solder seam joining two halves of the sheet terminal. There is no visible evidence of a separately added tubular core such as that described by Machling and Williamson (2016) for the Netherurd torc terminal. These observations confirm that the terminal is made from sheet, and it can be compared to the complete torc L.19a, which also has highly decorative and elaborate sheet gold terminals.
On both sides of the terminal there are splashes of molten gold similar to those seen on other objects in the fragmentary Hoard F.
Wt: 22.9g; D(term): 43.0mm; W: 44.0mm

F.73: Gold/silver alloy torc/bracelet (Pl. 14.25)
MSCC: (2P)R
BM: 1991,0501.89; Jackson no.: 77
Fragment of gold/silver alloy multi-strand torc or bracelet comprising one loop terminal (continuous with the neck-ring/body wires) and a short length of neck-ring/body, cut at the other end. Stage II construction of two circular-section wires plied together. The whole fragment is bent into a penannular ring, perhaps suggesting that it was originally part of an interlinked group.
Wt: 9.1g; D(ext): 49.3mm; D(nr): 3.7mm; D(wire): 1.9mm; D(term): 9.8mm

F.74: Gold/silver alloy torc (Pl. 14.25)
MSCC: ?(2P)R
BM: 1991,0501.151; Jackson no.: 84
Fragment of gold/silver alloy multi-strand torc neck-ring, consisting of a single circular-section rod, cut at both ends. It has clearly been plied with another rod to form a Stage II neck-ring.
Wt: 35.4g; D(wire): 8.9mm; L: 50.5mm

F.75–6: Gold/silver alloy torc (Pl. 14.26)
MSCC: (2P)F
Fragments of gold/silver alloy multi-strand torc, each comprising a single faceted wire, cut at both ends (see **Fig. 20.22**). Almost certainly part of a Stage II neck-ring formed

from two wires plied together. F.75 and F.76 are almost certainly part of the same torc.

F.75: BM: 1991,0501.173; Jackson no.: 134
Wt: 11.2g; D(wire): 6.0mm; L: 41.0mm

F.76: BM: 1991,0501.174; Jackson no.: 135
Stress cracks in several places.
Wt: 15.7g; D(wire): 5.8mm; L: 61.8mm

F.77: Gold/silver alloy torc (Pl. 14.26)
MSCC: (2P)F
BM: 1991,0501.210; Jackson no.: 215
Fragment of gold/silver alloy multi-strand torc neck-ring, cut at both ends (see **Fig. 20.20a–b**). Stage II construction of two faceted wires plied together. Stress cracks in several places.
Wt: 22.5g; D(nr): 10.5mm; D(wire): 5.6mm; L: 43.6mm; W: 13.3mm; T: 2.0mm

F.78: Gold/silver alloy torc (Pl. 14.26)
MSCC: (2P)F
BM: 1991,0501.37; Jackson no.: 43
Fragment of gold/silver alloy multi-strand torc comprising one double-loop terminal (continuous with the neck-ring wires) and part of the neck-ring, cut at the other end. Stage II construction of two faceted wires plied together. The terminal is very distorted, as if it has been deliberately untwisted, and there are tool marks on the neck-ring.
Wt: 115.0g; D(nr): 7.1mm; D(wire): 4.2mm; L: 97.2mm

F.79: Gold/silver alloy torc (Pl. 14.26)
MSCC: (?P(2P))R
BM: 1991,0501.152; Jackson no.: 85
Fragment of gold/silver alloy multi-strand torc neck-ring, cut at both ends. Stage II construction of two circular-section wires plied together. The wires are bent and distorted at the ends, and the whole fragment is curved in such a way as to suggest it originally formed part of a Stage III plied construction.
Wt: 37.9g; D(nr): 9.0mm; D(wire): 4.9mm; L: 77.8mm

F.80: Gold/silver alloy torc (Pl. 14.26)
MSCC: (2P)R
BM: 1991,0501.38; Jackson no.: 44
Fragment of gold/silver alloy multi-strand torc comprising one loop terminal (continuous with the neck-ring wires) and a length of the neck-ring, broken at the other end. Stage II construction of two circular-section wires plied together. Semi-coalesced fragments and small droplets of gold are fused to the terminal and neck-ring in many places.
Wt: 108.8g; D(nr): 7.0mm; D(wire): 4.2mm; D(term): 17.7mm; L: 130.9mm

F.81: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (2P)R
BM: 1991,0501.147; Jackson no.: 81
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends, and bent/damaged in the middle of the fragment. The patina suggests the damage to the middle may be relatively recent. Stage II construction of two circular-section wires plied together.
Wt: 32.4g; D(nr): 7.1mm; D(wire): 3.5mm; L: 116.7mm

F.82: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (2P)R
BM: 1991,0501.155; Jackson no.: 88
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising a length of neck-ring/body, cut at one end, and part of one ring terminal (continuous with the neck-ring wires), now broken across the mid-point of the ring. Stage II construction of two circular-section wires plied together.
Wt: 16.5g; D(nr): 4.1mm; D(wire): 2.3mm; L: 63.6mm

F.83: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (2P)R
BM: 1991,0501.159; Jackson no.: 95
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at both ends and bent into a rough loop. Stage II construction of two circular-section wires plied together.
Wt: 10.3g; D(rope): 4.5mm; D(wire): 2.3mm; L: 46.6mm

F.84: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (2P)R
BM: 1991,0501.158; Jackson no.: 94
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together. The ends of the wires are bent and distorted, and one end has been hammered. One wire extends further than the other at each end.
Wt: 12.7g; D(wire): 2.7mm; L: 49.1mm

F.85: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (3P)R
BM: 1991,0501.95; Jackson no.: 107
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc or bracelet, broken at one end and with what is perhaps a simple or unfinished cage terminal at the other, formed from the continuous, involuted, folded end of two of the neck-ring wires. Stage II construction of three circular-section wires plied together. The whole fragment is bent straight, and the broken end is damaged and the wires pulled apart. Small globules and fragments of gold/silver alloy adhere to the object in several places.
Wt: 180.0g; D(nr): 7.9mm; D(wire): 4.3mm; D(term): 17.3mm; L: 157.0mm

F.86: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (4C)T
BM: 1991,0501.42; Jackson no.: 47
Fragment of gold/silver alloy multi-strand torc or bracelet comprising one cage terminal and a length of neck-ring, broken at the other end. Stage II construction of four twisted wires coiled together around a hollow core, though one of the wires is untwisted (with simple square cross-section). The cage terminal is continuous with the neck-ring/body wires, though

in the area of the terminal the wires are circular in cross-section. One pair of the neck-ring wires join to form two involuted loops in the inside of the terminal. The other pair of wires are joined by a series of three involuted loops which create a more elaborate multi-lobed outer cage terminal.
Wt: 37.0g; D(nr): 6.4mm; D(wire): 2.6mm; D(term): 19.1mm; L: 79.7mm

F.87: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (3P)R
BM: 1991,0501.93; Jackson no.: 105
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising a single-loop terminal (continuous with two of the neck-ring/body wires) and a length of neck-ring/body, cut or broken and part melted at the other end. Stage II construction of three circular-section wires plied together, broken at different points along the remaining length. The whole fragment has been bent into a penannular ring, perhaps suggesting that it was originally part of an interlinked group. Globules of gold are fused to the neck-ring.
Wt: 94.2g; D(nr): 9.0mm; D(wire): 3.1mm; D(term): 15.0mm; L: 77.2mm

F.88: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (4C)R
BM: 1991,0501.22; Jackson no.: 17
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends, and bent (see **Figs 17.27–8, 20.8a–b**). Stage II construction of four circular-section wires coiled around a hollow core.
Wt: 38.2g; D(nr): 8.9mm; D(wire): 1.5mm; L: 95.1mm

F.89: Gold/silver alloy torc/bracelet (Pl. 14.26)
MSCC: (4P)R
BM: 1991,0501.101; Jackson no.: 113
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one triple-loop terminal and a length of neck-ring/body, cut at the other end (see **Fig. 17.33d**). Stage II construction of four circular-section wires plied together. Two of the neck-ring/body wires terminate in open loops, the third terminal loop is continuous, formed from the two remaining wires.
Wt: 19.7g; D(nr): 5.8mm; D(wire): 2.7mm; D(term): 20.4mm; L: 75.4mm

F.90: Gold/silver alloy torc/bracelet (Pl. 14.27)
MSCC: (4P)T
BM: 1991,0501.157; Jackson no.: 91
Fragment of gold/silver alloy multi-strand torc or bracelet consisting of one double-loop terminal and a length of neck-ring/body, cut or broken at the other end. Stage II construction of four twisted wires plied together. Each loop is continuous, extending to form one pair of the neck-ring/body wires. The outer loop is of twisted wire, the inner loop is circular in cross-section.
Wt: 30.5g; D(nr): 6.3mm; D(wire): 3.0mm; D(term): 15.0mm; L: 79.0mm

F.91: Gold/silver alloy torc/bracelet (Pl. 14.27)
MSCC: (4P)T
BM: 1991,0501.100; Jackson no.: 112
Fragment of gold/silver alloy multi-strand torc or bracelet consisting of one double-loop terminal and a length of neck-ring/body, cut or broken at the other end, with one wire extending slightly further than the others. Stage II construction of four twisted wires plied together. Each loop is continuous, extending to form one pair of the neck-ring/body wires. The outer loop is of twisted wire (although smoothed or possibly part melted on the exterior on one side); the inner loop is circular in cross-section. The whole fragment is bent into an open, penannular ring, perhaps suggesting that it was originally part of an interlinked group.
Wt: 19.6g; D(nr): 4.9mm; D(wire): 1.8mm; D(term): 11.9mm; L: 65.9mm

F.92–3: Gold/silver alloy torc (Pl. 14.27)
MSCC: (5C)R
F.92 and F.93 were broken in antiquity but join.

F.92:
BM: 1991,0501.82; Jackson no.: 70
Fragment of gold/silver alloy multi-strand torc, comprising one buffer terminal and a length of neck-ring, broken at the other end (see **Fig. 21.28**). Stage II construction of five circular-section wires coiled together around a hollow core. The terminal is a very simple, small, flat buffer terminal, face decorated with a simple incised design of interlocked circle and hatched crescent in an enclosing circle. The motif is in the form of an armadillo (see Joy 2008, fig. 5.1). A simple indented cordon runs around the edge of the terminal. See Chapter 21 for a full discussion of decoration.
Wt: 25.1g; D(nr): 5.3mm; D(wire): 1.3mm; D(term): 6.8mm; L: 100.5mm

F.93:
BM: 1991,0501.83; Jackson no.: 71
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends and bent into a rough ring, perhaps suggesting that it was originally part of an interlinked group. Stage II construction of five circular-section wires coiled together around a hollow core.
Wt: 20.2g; D(nr): 5.2mm; D(wire): 1.3mm; L: 67.5mm

F.94: Gold/silver alloy torc/bracelet (Pl. 14.27)
MSCC: (5C)T
BM: 1991,0501.17; Jackson no.: 8
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends, and bent into a rough ring, perhaps suggesting that it was originally part of an interlinked group. Stage II construction of five twisted wires coiled around a hollow core.
Wt: 65.3g; D(nr): 9.6mm; D(wire): 2.2mm; L: 78.3mm

F.95: Gold/silver alloy torc/bracelet (Pl. 14.27)
MSCC: (6C)T
BM: 1991,0501.18; Jackson no.: 9

F.90
F.91
F.92
F.93
F.94
F.95
F.96
F.97
F.98
F.99
F.100
F.101
F.102
F.103
F.104
F.105
F.106
F.107
F.108
F.109
F.110
F.111
0
5
10cm

Plate 14.27

Fragment of gold/silver alloy multi-strand torc comprising a cage terminal and part of the neck-ring/body, broken at the other end, where the wires are bent and distorted. Stage II construction of six twisted wires coiled around a hollow core. The terminal is a continuous series of three involuted loops, executed in a pair of parallel wires, one twisted and one circular in cross-section. These loops extend to form two pairs of the neck-ring/body strands, the fifth strand is soldered to join one of these pairs.
Wt: 28.5g; D(nr): 9.0mm; D(wire): 1.7mm; L: 66.7mm

F.96–7: Gold/silver alloy torc (Pl. 14.27)
MSCC: (8C)R
Fragments of gold/silver alloy multi-strand torc neck-ring, each cut and crushed flat at both ends, most likely by snipping with a double-bladed tool (see **Fig. 20.17**). Stage II construction of eight circular-section wires coiled together around a hollow core. F.96 and F.97 are almost certainly broken parts of the same incomplete torc.

F.96:
BM: 1991,0501.84; Jackson no.: 72
Wt: 30.9g; D(nr): 10.0mm; D(wire): 1.8mm; L: 85.1mm

F.97:
BM: 1991,0501.85; Jackson no.: 73
[Analysed: see Ch. 17]
Wt: 20.7g; D(nr): 9.8mm; D(wire): 1.8mm; L: 63.7mm

F.98: Gold/silver alloy torc (Pl. 14.27)
MSCC: (8C)T
BM: 1991,0501.15; Jackson no.: 6
Fragment of gold/silver alloy multi-strand torc comprising a cage terminal and part of the neck-ring, broken at the other end, where the wires are bent and distorted. Stage II construction of eight twisted wires coiled around a hollow core. The terminal is formed from four confronted circular-section loops, each a continuation of one pair of the neck-ring wires. The small space at the centre of these four loops is filled with a fused globule of gold/silver alloy.
Wt: 55.3g; D(nr): 6.2mm; D(wire): 0.9mm; D(term): 13.9mm; L: 92.0mm

F.99–104: Gold/silver alloy torc(s) (Pl. 14.27)
MSCC: (9C)R
F.99–104 may be part of the same or very similar torcs.

F.99:
BM: 1991,0501.137; Jackson no.: 27
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of nine circular-section wires coiled together around a hollow core (see **Fig. 17.33b–c**). Now in two parts, originally one piece coiled into an elongated loop, perhaps suggesting that it was once part of an interlinked group.
Wt: 15.5g; D(nr): 4.8mm; D(wire): 0.9mm; L: 84.1mm

F.100:
BM: 1991,0501.185; Jackson no.: 164

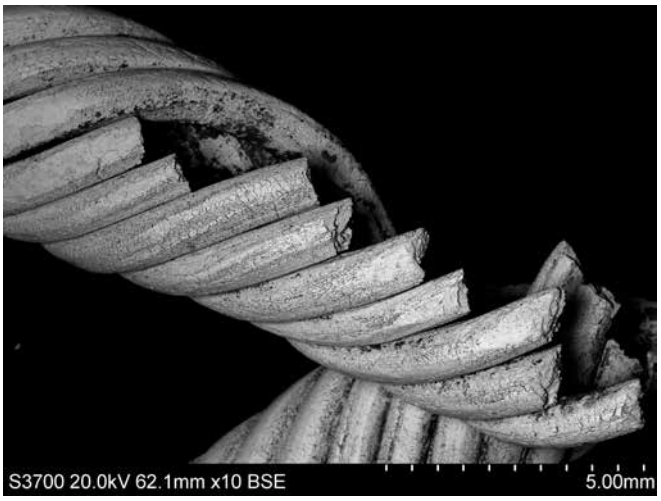


Figure 14.20 SEM detail showing extensive corrosion and cracking in F.102

Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of nine circular-section wires coiled together around a hollow core.
Wt: 4.1g; D(nr): 4.4mm; D(wire): 1.0mm; L: 68.1mm

F.101:
BM: 1991,0501.186; Jackson no.: 165
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of nine circular-section wires coiled together around a hollow core.
Wt: 6.9g; D(nr): 4.4mm; D(wire): 1.0mm; L: 88.7mm

F.102:
BM: 1991,0501.187; Jackson no.: 166
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends (see **Fig. 17.33a**). Stage II construction of nine circular-section wires coiled together around a hollow core. Now in several parts, originally one piece coiled into a rough loop, perhaps suggesting that it was once part of an interlinked group.

Notes from scientific analysis (Nigel Meeks)
Torc fragment F.102 is typical of the small torcs from Snettisham in terms of its wire construction. SEM images of the twisted wires of this fragmentary torc show the heavily cracked outer surface but also very smooth areas of polish from wear. The stress corrosion cracking and fractured wire ends show brittle failure of the entire multiple wire torc due to extensive corrosion after burial (**Figs 14.20, 17.33a**). The hollow centres of torcs such as this example are of great interest from the manufacturing viewpoint. The only way to tightly twist such wires and to additionally bend the assembled wires to the final curved shape without them collapsing onto each other was to wind them round a core or former (see Chs 17 and 19). The wires might also have been annealed on the former during winding to soften the metal and remove the springiness that would otherwise tend to untwist them. Annealing would allow very tight spiralling and the wires would then work-harden in their twisted form which would help prevent untwisting.
Wt: 16.9g; D(nr): 4.4mm; D(wire): 1.0mm; L: 74.2mm

F.103:
BM: 1991,0501.215; Jackson no.: 275
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of nine circular-section wires coiled together around a hollow core.
Wt: 4.1g; D(nr): 4.6mm; D(wire): 0.9mm; L: 50.8mm

F.104:
BM: 1991,0702.182; Jackson no.: 360
Fragment of gold/silver alloy multi-strand torc neck-ring, cut at one end and broken at the other (perhaps recently). Stage II construction of nine circular-section wires coiled together around a hollow core.
Wt: 1.8g; D(nr): 4.8mm; D(wire): 0.6mm; L: 29.5mm

F.105: Gold/silver alloy torc/bracelet (Pl. 14.27)
MSCC: (?P(3PZ))R
BM: 1991,0501.211; Jackson no.: 217
Fragment of gold/silver alloy multi-strand torc, comprising part of one ring terminal and a short length of neck-ring, broken at the other end. What remains of the neck-ring is a Stage II component of three circular-section wires plied together Z-twist. These merge to form part of a thickened ring terminal. Based on the construction of other similar torcs, it is likely that the complete neck-ring had a Stage III construction, with several similar Stage II ropes plied together.
Wt: 13.8g; D(rope): 4.3mm; D(term): 27.1mm; L: 48.8mm

F.106: Gold/silver alloy torc (Pl. 14.27)
MSCC: (?C(2P))R
BM: 1991,0501.19; Jackson no.: 10
[Analysed: see Ch. 17]
Buffer terminal from gold/silver alloy multi-strand torc (see **Fig. 21.39**). Nine small dot-punched domed projections around the outside edge of the terminal are set in a basket-hatched field. On the face of the terminal, a ring of dots and an engraved circle encompass engraved La Tène-style designs: lobe and tendril motif, with dot-punched/stippled and basket-hatched trumpet voids. On the back, projecting wire stubs are all that remain of the Stage III neck-ring. This was most likely formed of a number of ropes twisted around a hollow core, with the one remaining rope formed from two circular-section wires plied together. See Chapter 21 for a full discussion of decoration.

Notes from scientific analysis (Nigel Meeks)
An individual cast terminal, with all the wires broken away from the back. There is an engraved and punched design on the front and the side of the terminal has nine cast-in round granules of which four are very worn down (see **Fig. 21.39**). The engraved decoration shows the sharp V-shaped grooves of the engraving tool and small miss-cuts where lines start, end or overlap. The dot decoration is punched with a single round-ended tool which was also used to chase a few extended dots.

The side view shows the cast-in rounded 'knobs' which also have punched dot decoration, and between the knobs are chased indentations alternating vertical and horizontal. A row of round punch-marks runs around the neck of the terminal. The broken ends of the wires from the torc show they are round-section, 2mm in diameter, and twisted in pairs. In the centre of the wires is a mass of metal which is the plug of the casting that flowed into the hollow space within the twisted wires of the torc. This is also seen in the back view.

The back view of the terminal shows that the neck-ring is made of eight pairs of twisted wires. The neck-ring probably looked similar to torc L.13, a springy and flexible coiled multi-strand torc.
Wt: 39.1g; D(term): 21.1mm; T: 15.9mm

F.107: Gold/silver alloy torc/bracelet (Pl. 14.27)
MSCC: (2P(2P))R
BM: 1991,0501.92; Jackson no.: 104
Fragment of gold/silver alloy multi-strand torc comprising one ring terminal and a short length of neck-ring/body, cut or broken at the other end. Stage III construction of two ropes plied together, each of which consists of two circular-section wires plied together. The terminal is a thickened ring which extends to form the two neck-ring ropes.
Wt: 148.9g; D(nr): 13.2mm; D(rope): 7.7mm; D(wire): 3.3mm; D(term): 28.8mm; L: 90.5mm

F.108: Gold/silver alloy torc/bracelet (Pl. 14.27)
MSCC: (2P(2P))R
BM: 1991,0501.154; Jackson no.: 87
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage III construction of two ropes plied together, each of which consists of two circular-section wires plied together. One end is partially melted, and there is a small globule of gold and a fragment of part-melted wire fused to it.
Wt: 12.4g; D(nr): 6.0mm; D(rope): 2.9mm; D(wire): 1.5mm; L: 71.9mm

F.109–11: Gold/silver alloy torc (Pl. 14.27)
MSCC: (2PZ(2P))R
Fragments of gold/silver alloy multi-strand torc neck-ring, Stage III construction of two ropes plied together Z-twist, each of which is made up of two circular-section wires which are themselves plied tightly together. F.109–11 are most likely part of the same torc.

F.109: BM: 1991,0702.48; Jackson no.: 324
Fragment of neck-ring, cut at both ends.
Wt: 16.7g; D(nr): 12.0mm; D(rope): 6.5mm; D(wire): 3.5mm; L: 42.3mm

F.110: BM: 1991,0501.175; Jackson no.: 136
Fragment of neck-ring. What remains is just one Stage II rope of two circular-section wires which are plied together. One end is distorted, both are broken and show distress fractures around the break.
Wt: 13.6g; D(rope): 6.5mm; D(wire): 3.3mm; L: 73.4mm

F.111: BM: 1991,0501.176; Jackson no.: 137
Fragment of gold/silver alloy multi-strand torc neck-ring, cut at both ends.

Wt: 38.4g; D(nr): 12.4mm; D(rope): 6.5mm; D(wire): 3.3mm; L: 81.6mm

F.112–13: Gold/silver alloy torc (Pl. 14.28)
MSCC: (2PZ(4P))R
Fragments of gold/silver alloy multi-strand torc neck-ring, each broken at both ends. Stage III construction of two ropes loosely plied together Z-twist, each of which is made up of four circular-section wires plied together. F.112 and F.113 are most likely part of the same torc.

F.112: BM: 1991,0702.59; Jackson no.: 267
Wt: 11.0g; D(nr): 5.5mm; D(rope): 2.5mm; D(wire): 1.0mm; L: 97.5mm

F.113: BM: 1991,0501.184; Jackson no.: 157
Wt: 10.1g; D(nr): 6.0mm; D(rope): 3.0mm; D(wire): 1.0mm; L: 106.1mm

F.114: Gold/silver alloy torc/bracelet (Pl. 14.28)
MSCC: (3C(2P))R
BM: 1991,0501.39; Jackson no.: 45
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, raggedly cut/broken at both ends. Stage III construction of three ropes coiled around a hollow core, each rope formed of two circular-section wires plied together. The whole fragment is distorted and bent into a penannular loop.
Wt: 71.0g; D(nr): 8.4mm; D(rope): 4.2mm; D(wire): 1.9mm; L: 77.2mm

F.115: Gold/silver alloy torc (Pl. 14.28)
MSCC: (3P(6C))R
BM: 1991,0501.163; Jackson no.: 98
Fragment of gold/silver alloy multi-strand torc, comprising a buffer terminal and a very short length of the neck-ring (see **Fig. 21.21**). Stage III construction of three ropes plied together, each rope consisting of six circular-section wires coiled around a hollow core. The buffer terminal was cast onto the ends of the wires, and some of the metal has run down inside the hollow coils of the neck-ring ropes. The terminal has a plain, flat ended face. The edge is lightly convex, with a simple grooved moulding around the edge at the terminal end and a beaded moulding around the neck-ring end. The inner side of the edge is otherwise plain, while the outer side has six low circular bosses with trilobate divisions. See Chapter 21 for a full discussion of decoration.
Wt: 56.3g; D(nr): 16.5mm; D(rope): 8.5mm; D(wire): 1.7mm; D(term): 24.7mm; L: 30.4mm

F.116: Gold/silver alloy small torc (Pl. 14.28)
MSCC: (4CZ(2P))R
BM: 1991,0501.145; Jackson no.: 79
[Analysed: see Ch. 17]
Fragment of gold/silver alloy small multi-strand torc, comprising the majority of the neck-ring, cut at both ends where the terminals would have been (see **Figs 17.25, 17.29a–c, 20.4a–b, 20.19b**). Stage III construction of four ropes coiled together Z-twist, each of which consists of two circular-section wires plied together.
Wt: 22.1g; D(ext): 98.4mm; D(nr): 3.9mm; D(rope): 2.0mm; D(wire): 1.0mm

F.117: Gold/silver alloy torc (Pl. 14.28)
MSCC: (4P(2P))R
BM: 1991,0501.94; Jackson no.: 106
Fragment of gold/silver alloy multi-strand torc comprising one poorly-formed ring terminal, and a short length of neck-ring, broken and part melted at the other end. Stage III construction of four ropes plied together, each of which consists of two circular-section wires plied together. The thickened ring terminal is fused to the end of the neck-ring wires. It is either poorly cast or damaged by melting. Small globules of gold/silver alloy adhere to the whole object.
Wt: 147.0g; D(nr): 17.8mm; D(rope): 8.0mm; D(wire): 3.2mm; D(term): 40.8mm; L: 106.3mm

F.118: Gold/silver alloy torc (Pl. 14.28)
MSCC: (6C(2PZ))R
BM: 1991,0501.129; Jackson no.: 16
Fragment of gold/silver alloy multi-strand torc, comprising a simple cast-on buffer terminal and around half the neck-ring, cut at the other end. Stage III construction of six ropes coiled together, each of which consists of two circular-section wires plied together Z-twist. The terminal has a plain, flat face and two parallel grooved cordons around the edge.
Wt: 87.2g; D(nr): 10.3mm; D(rope): 3.0mm; D(wire): 1.6mm; D(term): 18.6mm; L: 148.7mm

F.119–20: Gold/silver alloy torc (Pl. 14.29)
MSCC: (5C(3P(2P)))R
[Analysed: see Ch. 17]
F.119 and F.120 are broken parts of the same incomplete torc (see **Figs 17.39–41, 17.43–5, 17.66, 21.17**). The break appears ancient (brittle/stress fracture). See Chapter 17 for information on construction, and Chapter 21 for a full discussion of decoration.

F.119:
BM: 1991,0501.81; Jackson no.: 69
Terminal of gold/silver alloy multi-strand torc, with the wires broken off at the start of the neck-ring. Little of the neck-ring remains, but it appears as F.120: Stage IV construction of five cables coiled together around a hollow core. Each cable consists of three ropes loosely plied together, and each rope is formed from two circular-section wires plied together. The reel terminal was cast onto the neck-ring and is decorated on both faces in relief with lobes, tendrils and bosses in a tripartite design repeated on each face. A simple indented line marks the rim. The hollow core of the reel is undecorated, and there is a plain collar where it meets the neck-ring.
Wt: 61.5g; D(term): 39.0mm; L: 43.0mm

F.120:
BM: 1991,0501.80; Jackson no.: 68
Fragment of gold/silver alloy multi-strand torc, comprising one reel terminal, and a damaged and broken length of neck-ring, as well as 16 additional wire fragments, now detached. Stage IV construction of five cables coiled

F.112

F.113

F.114

F.115

F.116

F.117

F.118

0 5 10cm

Plate 14.28

F.120

F.119

F.121

F.122

F.123

F.124

F.125

F.126

F.127

F.128

F.129

F.130

F.131

0 5 10cm

Plate 14.29

Figure 14.21 Detail of terminal showing engraved lines detailing cast features on F.120

together around a hollow core. Each cable consists of three ropes loosely plied together, and each rope is formed from two circular-section wires plied together. The reel terminal was cast onto the neck-ring and is decorated on both faces in relief with lobes, tendrils and bosses in a tripartite design repeated on each face. A simple indented line marks the rim. The hollow core of the reel is undecorated, and there is a plain collar where it meets the neck-ring.
Wt: 110.4g (main section); 9.5g (additional wire fragments); D(nr): 19.0mm; D(cable): 3.6mm; D(rope): 2.0mm; D(wire): 1.1mm; D(term): 39.3mm; L: 111.8mm

Notes from scientific analysis on F.119–20 (Nigel Meeks)
This reel terminal torc is in two parts, one (F.120) with a section of multi-strand wire neck-ring and the other (F.119) being just the second terminal which has completely broken away from the torc wires. The terminals are cast onto the wires. This is another example of a torc with a Stage IV neck-ring construction with very thin wires, and the design is very springy. In this case each pair of plied wires is tightly twisted to form the ropes, but the ropes and cables are not very tightly twisted together. This is clearly shown in the damaged part of the neck-ring in which the wires are stretched open. The open reel design, the broken wires, and the loose terminal all provide visible access to investigate the construction of the torc and allowed direct examination of the metal surfaces in the scanning electron microscope. Moreover, the broken wires provided samples for metallurgical mounting and polishing for microscopy and microanalysis to determine the true nature of the original alloy used and the metallurgical processes used in wire making and surface treatment (Ch. 17).

The wires form a very secure junction with the cast-on terminal as they enter at an extremely low angle and so a length of each wire curves around the inside of the terminal, forming a long joint (see **Fig. 17.66**). In this image two wire ends are also seen just piercing through the neck of the cast terminal. Looking inside the open reel of the terminal clearly shows the dribbles of solidified metal squeezing over and between the ends of the wires making a strong mechanical join even though the molten metal had not fully fused onto the wires at this point.

The terminals are different from most other terminals, not only because of the open reel design but also showing a deliberate overall surface texture that is unlike the smoother design of other torcs. The designs on the terminals are cast-in as part of the main terminal structure. The outlines of these decorative features were later engraved to define them more clearly (**Fig. 14.21**). The lines are sharply cut and well formed, and there is evidence of multiple cuts and marks where the tool has slipped or gone too far. These marks confirm the removal of metal by a pre-formed sharp metal engraving tool, rather than by the use of a chasing tool that displaces metal.
F.119 has broken away from the twisted wires at the base of the terminal neck but this again allows a clear view of the internal construction. The wires are cleanly broken suggesting brittle failure from stress corrosion of the wires in the ground. In this case the metal has gripped and fused to the outer sides of the shallow angle wires and has not flowed to fully encase them. This is probably a feature of the original clay core and clay plug that were moulded into the open inner regions to cover the wires to contain the molten metal on the terminal end.

F.121: Gold/silver alloy bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0501.146; Jackson no.: 80
Gold/silver alloy multi-strand bracelet with simple Stage II body of two circular-section wires plied together, and double-loop terminals. One double loop is continuous, where the wire is bent back on itself, while the other terminal has open loops formed by the two ends of the single doubled-back wire. Complete, but bent open and slightly distorted, with one body wire broken at the point of the bend.
Wt: 6.2g; D(ext): 69.0mm; D(nr): 2.4mm; D(wire): 1.1mm; D(term): 6.6mm

F.122: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.29)
MSCC: (?3P)T
BM: 1991,0501.153; Jackson no.: 86
[Analysed: see Ch. 17]
Fragments of gold/silver alloy wire, possibly from a torc or bracelet. Three lengths of twisted wire are very loosely and irregularly plied/wrapped together. All ends broken.
Wt: 11.0g; D(wire): 1.9mm; L: 74.0mm

F.123: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0501.79; Jackson no.: 67
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a ring, perhaps suggesting that it was originally part of an interlinked group. Stage II construction of two circular-section wires plied together.
Wt: 18.0g; D(ext): 25.2mm; D(nr): 7.1mm; D(wire): 3.3mm

F.124: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0501.194; Jackson no.: 176
Fragment of gold/silver alloy multi-strand torc neck-ring or

bracelet body, cut or broken at both ends. Stage II construction of two circular-section wires plied together.
Wt: 0.6g; D(nr): 1.9mm; D(wire): 0.9mm; L: 33.4mm

F.125: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0702.70; Jackson no.: 269, 416–18, 420–1
Six non-joining fragments of gold/silver alloy multi-strand torc neck-ring or bracelet body, each broken at both ends, and some bent. Stage II construction of two circular-section wires plied together.
Wt: 3.2g; D(nr): 2.0mm; D(wire): 1.0mm; L: 32.1 mm (max.)

F.126: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0702.72; Jackson no.: 427
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a rough U-shape. Stage II construction of two circular-section wires plied together.
Wt: 1.3g; D(nr): 2.2mm; D(wire): 1.1mm; L: 19.3mm

F.127: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0702.69; Jackson no.: 260
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other, bent into a rough U-shape. Stage II construction of two circular-section wires plied together.
Wt: 5.1g; D(nr): 3.4mm; D(wire): 1.5mm; L: 53.5mm

F.128: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0702.204; Jackson no.: 383
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together. The whole fragment is bent into a loose U-shape.
Wt: 4.6g; D(nr): 2.7mm; D(wire): 1.5mm; L: 38.9mm

F.129: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0702.221; Jackson no.: 407
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together.
Wt: 1.0g; D(nr): 3.2mm; D(wire): 1.5mm; L: 20.1mm

F.130: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0702.68; Jackson no.: 259
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a rough U-shape. Stage II construction of two circular-section wires plied together.
Wt: 4.2g; D(nr): 3.0mm; D(wire): 1.6mm; L: 37.2mm

F.131: Gold/silver alloy torc/bracelet (Pl. 14.29)
MSCC: (2P)R
BM: 1991,0702.219; Jackson no.: 399
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together.
Wt: 2.9g; D(nr): 3.3mm; D(wire): 1.6mm; L: 46.1mm

F.132–3: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P)R
Fragments of gold/silver alloy multi-strand torc neck-ring or bracelet body, each broken at both ends and bent into a U-shape. Stage II construction of two circular-section wires plied together. F.132–3 are probably part of the same object.

F.132: BM: 1991,0501.180; Jackson no.: 146
Wt: 5.1g; D(nr): 3.2mm; D(wire): 1.7mm; L: 36.4mm

F.133: BM: 1991,0501.181; Jackson no.: 147
Wt: 4.5g; D(nr): 3.2mm; D(wire): 1.7mm; L: 41.2mm

F.134: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P)R
BM: 1991,0702.205; Jackson no.: 384
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other. Stage II construction of two circular-section wires plied together.
Wt: 1.8g; D(nr): 3.4mm; D(wire): 1.7mm; L: 34.8mm

F.135: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (?P(2P))R
BM: 1991,0501.222; Jackson no.: 380
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a rough V-shape (see **Fig. 17.30a–c**). What remains is a Stage II component of two circular-section wires plied together. It is bent in a way which suggests it originally formed part of a Stage III plied construction.
Wt: 3.1g; D(nr): 3.5mm; D(wire): 1.8mm; L: 24.3mm

F.136: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P)R
BM: 1991,0702.220; Jackson no.: 400
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising a simple double-loop terminal (continuous with the neck-ring/body wires) and part of the neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied together.
Wt: 3.8g; D(nr): 3.6mm; D(wire): 1.9mm; D(term): 7.2mm; L: 28.8mm

F.137: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P)R
BM: 1991,0702.212; Jackson no.: 392
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends (one break perhaps recent). Stage II construction of two circular-section wires plied together. The whole fragment is bent into a U-shape.
Wt: 4.2g; D(nr): 3.6mm; D(wire): 1.9mm; L: 37.8mm

F.138: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (?C(2P))R

F.132
F.133
F.134
F.135
F.136
F.137
F.138
F.139
F.140
F.141
F.142
F.143
F.144
F.145
F.146
F.147
F.148
F.149
F.150
F.151
F.152
F.153
F.154
F.155
F.156
F.157
F.158
F.159
F.160
F.161
F.162
F.163
F.164
F.165
0
5
10cm

Plate 14.30

BM: 1991,0501.177; Jackson no.: 138
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, cut at one end and broken at the other (perhaps recently). What remains is a Stage II component of two circular-section wires plied together. It is bent in a way which suggests it originally formed part of a Stage III coiled construction.
Wt: 5.6g; D(nr): 4.5mm; D(wire): 2.3mm; L: 39.4mm

F.139: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P)R
BM: 1991,0501.178; Jackson no.: 139
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together. The whole fragment is bent into a U-shape.
Wt: 26.5g; D(nr): 6.9mm; D(wire): 3.3mm; L: 47.9mm

F.140: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P)R
BM: 1991,0501.102; Jackson no.: 115
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one terminal and a length of neck-ring/body broken at the other end and part melted. Stage II construction of two circular-section wires loosely plied together. The terminal is formed from the continuous looped end of the neck-ring/body wire, bent back on itself to form what is probably a damaged double loop or simple (perhaps unfinished) cage terminal. The whole fragment has been bent into a ring with the broken end just meeting the terminal, perhaps suggesting that it was originally part of an interlinked group.
Wt: 46.5g; D(ext): 58.4mm; D(nr): 8.7mm; D(wire): 3.5mm

F.141: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2PZ)R
BM: 1991,0702.71; Jackson no.: 419
Fragment of gold/silver alloy torc neck-ring or bracelet body, broken at both ends and bent into a rough U-shape. Stage II construction of two circular-section wires plied together Z-twist.
Wt: 0.8g; D(nr): 2.0mm; D(wire): 1.0mm; L: 19.0mm

F.142: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (?P(2PZ))R
BM: 1991,0501.179; Jackson no.: 141
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends and with one wire broken in the middle. What remains is a Stage II component of two circular-section wires plied together Z-twist. It is bent in a way which suggests it originally formed part of a Stage III plied construction.
Wt: 11.6g; D(nr): 4.3mm; D(wire): 1.9mm; L: 55.5mm

F.143: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (?C(3P))R
BM: 1991,0702.67; Jackson no.: 266, 271
Two joining fragments of gold/silver alloy torc neck-ring or bracelet body, broken at both ends. What remains are Stage II components of three circular-section wires plied together. The fragments are bent in a way which suggests they may have originally formed part of a Stage III coiled construction, though this is not certain.
Wt: 6.3g; D(rope): 2.6mm; D(wire): 1.2mm; L: 67.5 mm (max.)

F.144: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (3P)2T+1R
BM: 1991,0501.188; Jackson no.: 168
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two twisted and one circular-section wire plied together.
Wt: 4.2g; D(nr): 4.2mm; D(wire): 2.1mm; L: 35.5mm

F.145: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (4P)T
BM: 1991,0501.190; Jackson no.: 170
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other. Stage II construction of four twisted wires plied together. The wires are splayed out at each end.
Wt: 8.0g; D(nr): 4.4mm; D(wire): 1.7mm; L: 48.8mm

F.146: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (6C)3R+3T
BM: 1991,0501.214; Jackson no.: 240
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc or bracelet, comprising one buffer terminal, and part of the neck-ring/body, broken at the other end. Stage II construction of six wires coiled together around a hollow core; three of the wires are twisted and three are circular in cross-section. The terminal is a simple 'cap' to the wires, with inset face-plate with worn dot-punched decoration. Two crimped or 'pie-crust' cordons run around the edge circumference of the terminal. These mouldings are very worn; in one area they are completely worn away (**Figs 14.22**; see Ch. 21 for discussion of decoration).

Notes from scientific analysis (Nigel Meeks)
The twisted square-section wires are very heavily worn through prolonged use. The outer wire surfaces have been worn smooth such that some of the square sections are unrecognisable; however, some of the inner square corners have worn deeply into the adjacent wires through use of the torc over time. These heavy wear characteristics are seen on many torcs (see Ch. 20). In this case the small object may have been a bracelet, worn on the wrist, which would account for the extensive wear, being easily exposed to daily manual activities. The small terminal firmly fixed the coiled wires in place. In this case, the terminal looks like a sheet cap which has been moulded over the ends of the wires and probably soldered into position.
Wt: 4.5g; D(nr): 6.7mm; D(wire): 1.5mm; D(term): 8.6mm; L: 27.8mm

F.147–8: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (6C)R
[Analysed: see Ch. 17]
Fragments of gold/silver alloy multi-strand torc neck-ring or

Figure 14.22 SEM detail showing the heavily worn twisted wires and terminal on F.146

bracelet body. Stage II construction of six circular-section wires coiled together around a hollow core. F.147 and F.148 are probably part of the same object.

F.147: BM: 1991,0501.221; Jackson no.: 353
Broken at both ends.
Wt: 3.8g; D(nr): 6.5mm; D(wire): 1.5mm; L: 36.5mm

F.148: BM: 1991,0501.86; Jackson no.: 74
Cut and distorted at both ends.
Wt: 8.4g; D(nr): 6.9mm; D(wire): 1.6mm; L: 55.4mm

F.149: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.30)
MSCC: (?C)R
BM: 1991,0702.95; Jackson no.: 167
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. The remaining fragment is a circular-section wire, coiled in such a way as to suggest it was originally part of a Stage II coiled construction.
Wt: 0.2g; D(wire): 0.9mm; L: 13.5mm

F.150: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.30)
MSCC: (?C)T
BM: 1991,0702.96; Jackson no.: 175
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. The remaining fragment is a twisted wire, coiled in such a way as to suggest it was originally part of a Stage II coiled construction.
Wt: 0.3g; D(wire): 1.4mm; L: 15.6mm

F.151: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (?C)R
BM: 1991,0702.228.b; Jackson no.: 451
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends (one break perhaps recent). What remains are two circular-section wires, coiled together in a way which suggests they originally formed part of a Stage II coiled construction.
Wt: 0.8g; D(wire): 1.7mm; L: 26.4mm

F.152: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.30)
MSCC: (?C)R
BM: 1991,0702.228.a; Jackson no.: 451
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. The remaining fragment is a circular-section wire, coiled in such a way as to suggest it was originally part of a Stage II coiled construction.
Wt: 1.5g; D(wire): 2.1mm; L: 35.7mm

F.153: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P(2P))R
BM: 1991,0407.44.a; Site code: SN/AD
Context details: Hoard F pit; Excavated find, surface trowelling.
[Analysed: see Ch. 17]

Fragment of a gold/silver alloy Stage III multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other. The cable is formed from two ropes plied together, each of which is made up of two circular-section wires plied together. The fragment is bent into a narrow, rough U-shape. The fact that the fragment is bent into a loop (though open) perhaps suggests that it was originally part of an interlinked group.
Wt: 11.7g; D(nr): 6.0mm; D(rope): 3.3mm; D(wire): 1.5mm; L: 48.7mm

F.154–7: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P(3P))R
F.154–7 may be broken parts of the same incomplete torc. (F.158 may be part of the same object, though the wire diameter is a little thicker)

F.154: BM: 1991,0501.144; Jackson no.: 78
[Analysed: see Ch. 17]
Fragment of a gold/silver alloy Stage III multi-strand torc neck-ring or bracelet body, cut at both ends (see **Fig. 17.21**). The cable is formed from two ropes plied together, each of which is made up of three circular-section wires plied together. The fragment is bent into a penannular ring, perhaps suggesting that it was originally part of an interlinked group.
Wt: 8.1g; D(nr): 5.5mm; D(rope): 2.9mm; D(wire): 0.9mm; L: 35.9mm

F.155: BM: 1991,0702.17; Jackson no.: 23
Fragment of a gold/silver alloy Stage III multi-strand torc neck-ring or bracelet body, broken at both ends. The cable is formed from two ropes plied together, each of which is made up of three circular-section wires plied together. The fragment is coiled into a rough ring with overlapping ends, perhaps suggesting that it was originally part of an interlinked group.
Wt: 12.3g; D(nr): 4.7mm; D(rope): 2.3mm; D(wire): 1.1mm; L: 42.7mm

F.156: BM: 1991,0501.87; Jackson no.: 75
[Analysed: see Ch. 17]
Fragment of a gold/silver alloy Stage III multi-strand torc neck-ring or bracelet body, cut at both ends (**Fig. 17.31a–d**).

The cable is formed from two ropes plied together, each of which is made up of three circular-section wires plied together. The fragment is bent into a rough penannular ring, perhaps suggesting that it was originally part of an interlinked group.
Wt: 9.5g; D(nr): 5.6mm; D(rope): 2.9mm; D(wire): 1.3mm; L: 35.0mm

F.157: BM: 1991,0501.88; Jackson no.: 76
Fragment of a gold/silver alloy Stage III multi-strand torc neck-ring or bracelet body, cut at both ends. The cable is formed from two ropes plied together, each of which is made up of three circular-section wires plied together. The fragment is bent into a rough ring with overlapping ends, perhaps suggesting that it was originally part of an interlinked group.
Wt: 18.5g; D(nr): 5.5mm; D(rope): 2.9mm; D(wire): 1.3mm; L: 47.1mm

F.158: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (2P(3P))R
BM: 1991,0501.191; Jackson no.: 172
[Analysed: see Ch. 17]
Fragment of gold/silver alloy Stage III multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other. The cable is formed from two ropes plied together, each of which consists of three circular-section wires plied together.
Wt: 8.2g; D(nr): 6.2mm; D(rope): 2.9mm; D(wire): 1.4mm; L: 55.1mm

F.159: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (3P(2P))R
BM: 1991,0501.193; Jackson no.: 174
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand Stage III torc neck-ring or bracelet body, broken at both ends. The cable is formed from three ropes plied together, each of which consists of two circular-section wires plied together. The whole fragment is curved into a shallow U-shape.
Wt: 1.9g; D(nr): 2.1mm; D(rope): 2.0mm; D(wire): 1.1mm; L: 24.6mm

F.160: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (?C(2P))R
BM: 1991,0501.192; Jackson no.: 173
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends (see **Fig. 17.26a–d**). What remains is a Stage II component, formed from two circular-section wires plied together. The whole is coiled, suggesting that it might once have been part of a Stage III coiled construction. One of the wires is broken in the centre of the fragment, but continues on both sides.
Wt: 5.0g; D(rope): 2.6mm; D(wire): 1.5mm; L: 62.6mm

F.161: Gold/silver alloy torc/bracelet (Pl. 14.30)
MSCC: (?C(4P))T
BM: 1991,0501.189; Jackson no.: 169
Fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other. What remains is a Stage II component, formed from four twisted wires plied together. The whole is coiled, suggesting that it might once have been part of a Stage III coiled construction.
Wt: 11.0g; D(rope): 4.1mm; D(wire): 1.7mm; L: 55.6mm

F.162–5: Copper alloy torc (Pl. 14.30)
MSCC: (5C)3Q+2T
Fragments of copper alloy multi-strand torc, possibly gilded, with buffer terminals. The terminals are plain, with a simple grooved cordon around the edge. Stage II construction of five wires coiled together around a hollow core. Two of the wires are twisted and the other three are square-section. F.162–5 are most likely part of the same torc.

F.162: BM: 1991,0702.92; Jackson no.: 161
Fragment comprises one plain buffer terminal and a short length of neck-ring, broken at the other end.
Wt: 7.0g; D(nr): 6.5mm; D(wire): 1.4mm; D(term): 9.5mm; L: 39.3mm

F.163: BM: 1991,0702.94; Jackson no.: 163
Fragment of torc neck-ring, broken at both ends.
Wt: 9.1g; D(nr): 5.3mm; D(wire): 1.5mm; L: 78.5mm

F.164: BM: 1991,0702.123; Jackson no.: 243
Fragment comprises one buffer terminal and a short length of neck-ring, broken at the other end. The whole fragment is bent back on itself to form a U-shape, with wires very damaged/broken at the base of the 'U'.
Wt: 15.7g; D(nr): 5.5mm; D(wire): 1.2mm; D(term): 9.1mm; L: 68.3mm

F.165: BM: 1991,0702.135; Jackson no.: 255
Fragment of torc neck-ring, broken at both ends.
Wt: 5.3g; D(nr): 5.7mm; D(wire): 1.1mm; L: 52.2mm

F.166: Copper alloy torc (Pl. 14.31)
MSCC: (5C)T
BM: 1991,0702.132; Jackson no.: 251
[Analysed: Ch. 19 for identification of wood]
Fragment of copper alloy, possibly gilded, multi-strand torc neck-ring, broken at one end and cut at the other (see **Fig. 19.1c**). Stage II construction of five twisted wires coiled together. The fragment is bent into a U-shape, perhaps suggesting that it was originally part of an interlinked group. Damage at the centre of the tight bend reveals a carbonised wood core.
Wt: 10.4g; D(nr): 4.5mm; D(wire): 1.3mm; L: 60.6mm

F.167: Copper alloy torc (Pl. 14.31)
MSCC: (6C)T
BM: 1991,0702.122; Jackson no.: 242
[Analysed: see Ch. 17, and Ch. 19 for identification of wood]
Fragment of copper alloy multi-strand torc neck-ring, broken at one end and cut at the other with a double-bladed implement (see **Figs 17.55a–c, 19.1b**). Stage II construction of six twisted wires coiled together. Carbonised wood is visible within the core, emerging from the broken end.
Wt: 10.7g; D(nr): 6.4mm; D(wire): 1.4mm; L: 79.2mm

F.166
F.167
F.168
F.169
F.170
F.171
F.172
F.173
F.174
F.175
F.176
F.177
F.178
F.179
F.180
F.181
F.182
F.183
F.184
F.185
F.186
F.187
F.188
F.189
F.190
F.191
F.192
F.193
F.194
F.195
F.196
0
5
10cm

Plate 14.31

F.168: Copper alloy torc (Pl. 14.31)
MSCC: (6C)T
BM: 1991,0702.121; Jackson no.: 241
[Analysed: see Ch. 17, and Ch. 19 for identification of wood; Radiocarbon dated: See Table 5.2]
Fragment of copper alloy multi-strand torc comprising one plain buffer terminal and a short length of neck-ring, broken at the other end (see **Figs 17.35a–b**, **19.1a**). Stage II construction of six twisted wires coiled together. Carbonised wood is visible within the core, emerging from the broken end.
Wt: 9.3g; D(nr): 5.4mm; D(wire): 1.3mm; D(term): 8.8mm; L: 62.2mm

F.169: Copper alloy torc (Pl. 14.31)
MSCC: (6CZ(2PZ))R
BM: 1991,0702.61; Jackson no.: 302, 303
Fragment of copper alloy, possibly gilded, multi-strand Stage III torc, comprising a buffer terminal and length of neck-ring, cut at the other end with a double-bladed implement. The cable is formed from six ropes coiled together Z-twist around a hollow core, each rope consisting of two circular-section wires plied together, also Z-twist. The buffer terminal is badly corroded. The end appears to be plain and flat, the sides plain and convex, with two simple, grooved cordons around the edge.
Wt: 72.0g; D(nr): 9.6mm; D(rope): 3.0mm; D(wire): 1.4mm; D(term): 19.3mm; L: 92.5mm

F.170: Copper alloy wire/?torc/?bracelet (Pl. 14.31)
MSCC: (?C)T
BM: 1991,0702.274; Jackson no.: 501c
Fragment of copper alloy, possibly gilded, twisted wire, perhaps from a multi-strand torc or bracelet, broken at both ends. This wire curved in a way which suggests it might once have formed part of a Stage II coiled construction.
Wt: 0.4g; D(wire): 1.9mm; L: 14.5mm

F.171: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (4P)T
BM: 1991,0702.88; Jackson no.: 154
Fragment of copper alloy, possibly gilded, multi-strand torc neck-ring or bracelet body, broken at both ends and curved. Stage II construction of four twisted wires plied together.
Wt: 2.6g; D(nr): 3.3mm; D(wire): 1.5mm; L: 26.7mm

F.172: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (6C)T
BM: 1991,0702.14; Jackson no.: 92, 93
Fragment of copper alloy, possibly gilded, multi-strand torc neck-ring or bracelet body, broken at both ends, and a single additional broken wire fragment. Stage II construction of six twisted wires coiled together around a hollow core.
Wt: 6.4g; D(nr): 6.5mm; D(wire): 1.5mm; L: 85.1mm

F.173: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (?C(2P))R
BM: 1991,0702.140; Jackson no.: 263
Fragment of copper alloy, possibly gilded, multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component, formed from two circular-section wires plied together. This is curved in a way which suggests it might once have formed part of a Stage III coiled construction.
Wt: 3.5g; D(rope): 3.5mm; D(wire): 1.7mm; L: 55.3mm

F.174: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (2P(3P))R
BM: 1991,0501.213; Jackson no.: 235
Fragment of copper alloy, possibly gilded, multi-strand torc neck-ring or bracelet body, broken at both ends, with each wire broken at different points. Stage III construction of two ropes plied together, each of which consists of three circular-section wires plied together.
Wt: 3.5g; D(nr): 4.5mm; D(rope): 2.4mm; D(wire): 1.1mm; L: 39.1mm

F.175–8: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (2P(2P))R
Fragments of copper alloy, possibly gilded, multi-strand torc neck-ring or bracelet body, each broken at both ends. Stage III construction of two ropes plied together, each rope made up of two circular-section wires plied together. F.175–8 may be from the same torc.

F.175: BM: 1991,0702.169; Jackson no.: 336
One break perhaps recent.
Wt: 3.5g; D(nr): 5.8mm; D(rope): 3.3mm; D(wire): 1.2mm; L: 30.9mm

F.176: BM: 1991,0702.161; Jackson no.: 328
Wt: 4.2g; D(nr): 6.5mm; D(rope): 3.0mm; D(wire): 1.4mm; L: 40.8mm

F.177: BM: 1991,0702.156; Jackson no.: 322
Wt: 11.2g; D(nr): 7.5mm; D(rope): 3.8mm; D(wire): 1.7mm; L: 63.5mm

F.178: BM: 1991,0702.158; Jackson no.: 325
Wt: 5.4g; D(nr): 5.6mm; D(rope): 3.0mm; D(wire): 1.8mm; L: 41.0mm

F.179: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (2P(2P+3P))R
BM: 1991,0702.117; Jackson no.: 236
[Analysed: see Ch. 17]
Fragment of copper alloy multi-strand torc or bracelet comprising one buffer terminal and a short length of neck-ring/body, broken at the other end (see **Fig. 17.69a–c**). The terminal has a plain face and pair of simple grooved cordons around the edge. Stage III construction of two ropes plied together. One rope is formed from two circular-section wires plied together, and the other from three circular-section wires plied together (one slightly finer than the others).
Wt: 6.3g; D(nr): 5.5mm; D(rope): 3.0mm; D(wire): 1.5mm; D(term): 7.9mm; L: 35.0mm

F.180–4: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (2P(2P))R

Fragments of gilded copper alloy multi-strand torc neck-ring or bracelet body, each broken at both ends (see **Figs 17.48a–b, 17.50a–b**). Stage III construction of two ropes plied together, each rope made up of two circular-section wires plied together. F.180–4 may be part of the same object.

F.180: BM: 1991,0702.164; Jackson no.: 331
Wt: 3.9g; D(nr): 5.4mm; D(rope): 3.0mm; D(wire): 1.4mm; L: 40.0mm

F.181: BM: 1991,0702.172; Jackson no.: 339
The fragment is heavily damaged, perhaps part melted.
Wt: 3.6g; D(nr): 5.8mm; D(rope): 3.3mm; D(wire): 1.9mm; L: 35.7mm

F.182: BM: 1991,0702.111; Jackson no.: 229
[Analysed: see Ch. 17]
The ropes are pulled apart at one end.
Wt: 6.7g; D(nr): 5.7mm; D(rope): 3.7mm; D(wire): 1.7mm; L: 53.2mm

F.183: BM: 1991,0702.112; Jackson no.: 230
Wt: 6.0g; D(nr): 6.0mm; D(rope): 3.0mm; D(wire): 1.2mm; L: 54.8mm

F.184: BM: 1991,0702.116; Jackson no.: 234
Wt: 8.4g; D(nr): 5.9mm; D(rope): 3.7mm; D(wire): 1.6mm; L: 57.3mm

F.185: Copper alloy torc (Pl. 14.31)
BM: 1991,0702.49; Jackson no.: 210–13
Four joining fragments of cast copper alloy ring/torus terminal from a torc (see **Fig. 21.16**). The outer edge is decorated with small cast raised circular dots and an inscribed design, now indistinct due to corrosion products, consisting of flowing fin motifs. There is a decorative cast moulding around the collar. Hammer blows are visible in several places, suggesting the terminal was deliberately broken up in antiquity. See Chapter 21 for a full discussion of decoration.
Wt: 75.6g; D(term): 32.0mm; L: 38.0mm; T: 13.0mm

F.186: Copper alloy torc (Pl. 14.31)
MSCC: (4P)R
BM: 1991,0702.54; Jackson no.: 391, 402, 404–5, 408–9
Copper alloy torc in several parts (re-joined from fragments). The torc has simple double-loop terminals. On both sides, the loops appear to be continuous, extending to form the two pairs of wires which form the neck-ring. Stage II construction of four circular-section wires plied together.
Wt: 20.5g; D(ext): 101.2mm (approx.); D(nr): 3.8mm; D(wire): 1.5mm; D(term): 11.3mm

F.187: Copper alloy torc (Pl. 14.31)
MSCC: (8C)T
BM: 1991,0702.16; Jackson no.: 15
Fragment of copper alloy multi-strand torc, comprising one buffer terminal and a length of neck-ring, with the wires irregularly broken and partly distorted at the other end. The terminal has a plain, slightly convex, face and pair of grooved cordons around the edge. Stage II construction of eight twisted wires coiled together. The whole fragment is bent into a U-shape.
Wt: 19.2g; D(nr): 7.8mm; D(wire): 1.8mm; D(term): 12.9mm; L: 47.9mm

F.188: Copper alloy torc/bracelet (Pl. 14.31)
MSCC: (7C)T
BM: 1991,0702.139; Jackson no.: 258
Fragment of copper alloy multi-strand torc or bracelet, comprising one plain, rounded buffer terminal and a short length of neck-ring/body, broken and ragged at the other end. Stage II construction of seven twisted wires coiled together around a hollow core. The fragment has been bent into a penannular ring, perhaps suggesting that it was originally part of an interlinked group, and the wires are heavily worn.
Wt: 8.4g; D(nr): 5.3mm; D(wire): 1.0mm; D(term): 8.7mm; L: 34.5mm

F.189: Copper alloy torc (Pl. 14.31)
MSCC: (6C)3R+3T
BM: 1991,0702.120; Jackson no.: 239
Fragment of copper alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of six wires coiled together around a hollow core. Three of the wires are twisted, alternating with three circular-section wires.
Wt: 15.2g; D(nr): 7.7mm; D(wire): 1.6mm; L: 75.9mm

F.190–6: Copper alloy torc (Pl. 14.31)
MSCC: (6C)T
F.190–6 may be part of the same torc.

F.190:
BM: 1991,0702.124; Jackson no.: 244
Fragment of copper alloy multi-strand torc neck-ring, broken at one end and cut at the other with a double-bladed implement. Stage II construction of six twisted wires coiled together around a hollow core.
Wt: 10.4g; D(nr): 6.3mm; D(wire): 1.7mm; L: 71.1mm

F.191:
BM: 1991,0702.125; Jackson no.: 244
Fragment of copper alloy multi-strand torc neck-ring, broken at both ends. Stage II construction, probably originally of six twisted wires coiled together around a hollow core, but only four of these strands now remain.
Wt: 5.5g; D(wire): 1.7mm; L: 61.5mm

F.192:
BM: 1991,0702.126; Jackson no.: 245
Fragment of copper alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of six twisted wires coiled together around a hollow core. The fragment is bent into a shallow U-shape.
Wt: 6.0g; D(nr): 5.7mm; D(wire): 1.5mm; L: 36.0mm

F.193:
BM: 1991,0702.128; Jackson no.: 247
Fragment of copper alloy multi-strand torc neck-ring, cut at

both ends with a double-bladed implement. Stage II construction of six twisted wires coiled together around a hollow core.
Wt: 7.1g; D(nr): 6.7mm; D(wire): 1.2mm; L: 54.8mm

F.194:
BM: 1991,0702.129; Jackson no.: 248
Fragment of copper alloy multi-strand torc neck-ring, broken at both ends. Stage II construction, probably originally of six twisted wires coiled together around a hollow core, but only four of these strands now remain.
Wt: 4.0g; D(wire): 1.4mm; L: 45.9mm

F.195:
BM: 1991,0702.131; Jackson no.: 250
Fragment of copper alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of six twisted wires coiled together around a hollow core. Three additional twisted wires have been loosely wrapped around the outside, but may originally have been part of the same object.
Wt: 10.1g; D(nr): 7.1mm; D(wire): 1.3mm; L: 50.0mm

F.196:
BM: 1991,0702.134; Jackson no.: 253
Fragment of copper alloy multi-strand torc, comprising a short length of twisted wire, broken at both ends. The wire is coiled in such a way to suggest that it once formed part of a Stage II neck-ring formed from multiple twisted wires coiled together around a hollow core.
Wt: 0.6g; D(wire): 1.5mm; L: 18.2mm

F.197–8: Copper alloy torc (Pl. 14.32)
MSCC: (5C)T
Fragments of copper alloy multi-strand torc neck-ring, each broken at both ends. Stage II construction of five twisted wires coiled together around a hollow core. F.197–8 may be part of the same torc.

F.197: BM: 1991,0702.127; Jackson no.: 246
Wt: 3.7g; D(nr): 6.3mm; D(wire): 1.3mm; L: 32.0mm

F.198: BM: 1991,0702.130; Jackson no.: 249
One wire extends substantially further than the others.
Wt: 5.2g; D(nr): 6.4mm; D(wire): 1.5mm; L: 67.4mm

F.199: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (4C)T
BM: 1991,0702.136; Jackson no.: 256
[Analysed: see Ch. 19 for identification of wood]
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends (see **Fig. 19.1d**). Stage II construction of four twisted wires coiled together. The whole fragment is bent back on itself to form a rough figure-of-eight shape, perhaps suggesting that it was originally part of an interlinked group. The wires are very corroded, with significant damage in some areas.
Wt: 9.8g; D(nr): 4.8mm; D(wire): 1.3mm; L: 55.0mm

F.200: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (5C)T
BM: 1991,0702.133; Jackson no.: 252
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other. The Stage II neck-ring is formed from five twisted wires coiled together around a hollow core. One end of the fragment is curved into a loop, perhaps suggesting that it was originally part of an interlinked group.
Wt: 12.4g; D(nr): 4.9mm; D(wire): 1.5mm; L: 56.8mm

F.201: Copper alloy torc (Pl. 14.32)
MSCC: (4C)R
BM: 1991,0702.18; Jackson no.: 28, 89, 171, 265
Fragments of copper alloy multi-strand torc neck-ring, now in two sections, re-joined from four fragments. The sections join to form a near-complete neck-ring, broken at both ends, but likely missing only its terminals. Stage II construction of four circular-section wires coiled together.
Wt: 24.0g; D(ext): 115.5mm; D(nr): 3.3mm; D(wire): 1.1mm

F.202–3: Copper alloy torc (Pl. 14.32)
MSCC: (4P(6C))T
F.202–3 are almost certainly from the same torc. Each fragment comprises one plain buffer terminal and a very small part of the neck-ring, broken at the other end. The terminals have plain faces, simple grooved rims and plain, convex edges. Very little of the Stage III neck-ring remains, but it was most likely formed from four ropes plied together, each of which was formed from six twisted wires coiled together.

F.202: BM: 1991,0702.11; Jackson no.: 11
Wt: 55.0g; D(wire): 1.9mm; D(term): 28.3mm; L: 27.7mm

F.203: BM: 1991,0702.13; Jackson no.: 99
Wt: 59.0g; D(wire): 1.8mm; D(term): 28.4mm; L: 28.3mm

F.204–5: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (?3C(2P))R
F.204–5 may be part of the same object.

F.204:
BM: 1991,0702.76; Jackson no.: 410
Fragment of copper alloy multi-strand torc or bracelet comprising a single loop (continuous with the neck-ring/body wires) of what was probably originally a double- or triple-loop terminal, and a short section of neck-ring/body, broken at the other end. All that remains of the neck-ring/body is a single rope formed from two circular-section wires plied together. This rope is coiled in a way which suggests that it was originally part of a Stage III construction of at least three such ropes coiled together around a hollow core.
Wt: 1.4g; D(rope): 2.8mm; D(wire): 1.5mm; D(term): 14.2mm; L: 27.5mm

F.205:
BM: 1991,0702.74; Jackson no.: 411–12, 423, 425, 428, 431, 436, 438, 439, 442–3, 447, 471
Thirteen non-joining fragments of copper alloy torc neck-ring or bracelet body, each broken at both ends. Stage II construction of two circular-section wires plied together. Most are bent or coiled as if they once have formed part of a

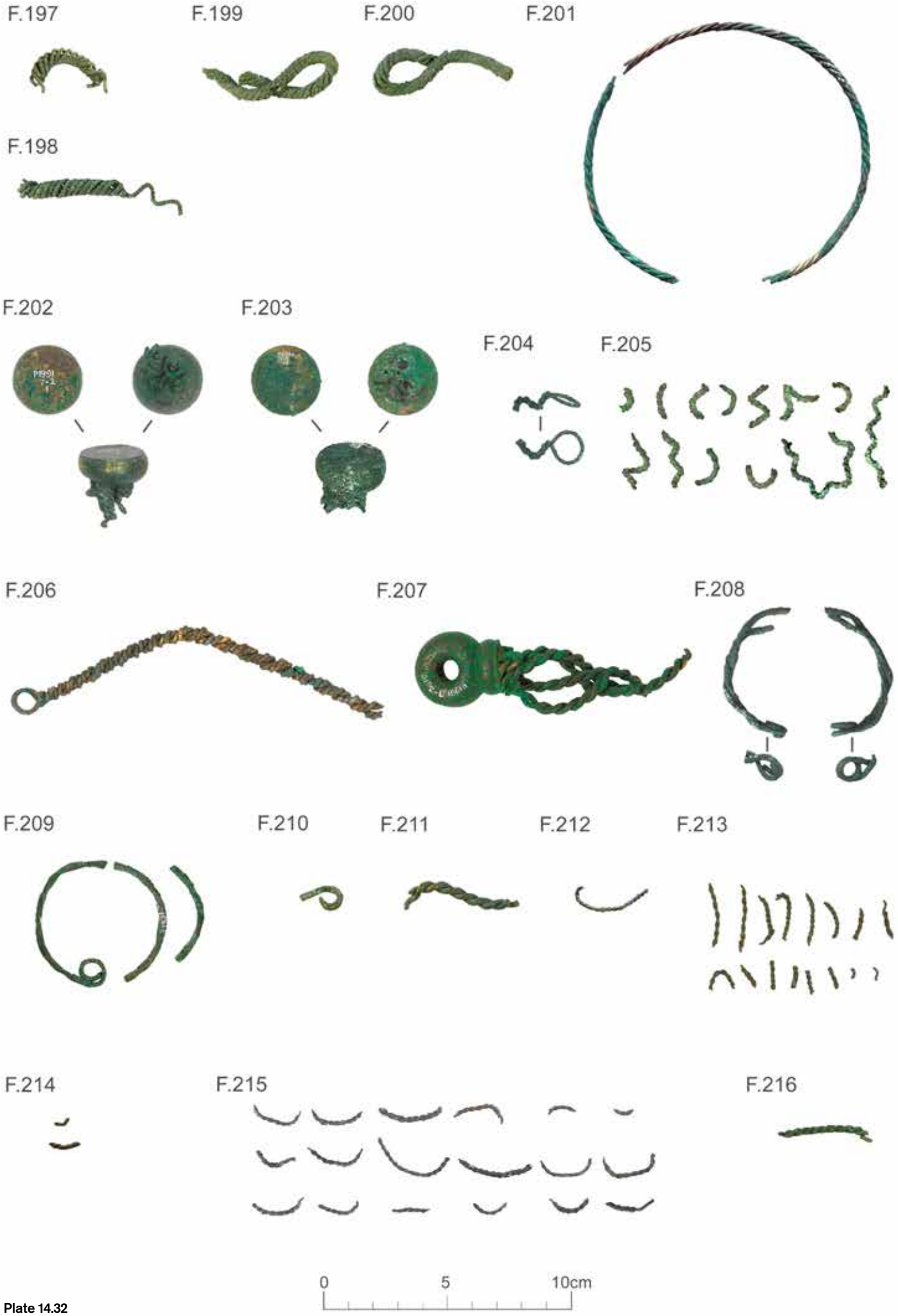

F.197
F.199
F.200
F.201
F.198
F.202
F.203
F.204
F.205
F.206
F.207
F.208
F.209
F.210
F.211
F.212
F.213
F.214
F.215
F.216
0
5
10cm

Plate 14.32

Stage III coiled construction.
Wt: 10.8g; D(nr): 2.6mm; D(wire): 1.4mm; L: 41.2 mm (max.)

F.206: Copper alloy torc (Pl. 14.32)
MSCC: (2P(2P))R
BM: 1991,0702.20; Jackson no.: 49
Fragment of copper alloy multi-strand torc, comprising one double-loop terminal and part of the neck-ring, cut at the other end. Stage III construction of two ropes plied together, each of which is formed from two circular-section wires plied together. Each terminal loop is continuous with a pair of wires which form one of the neck-ring ropes.
Wt: 24.0g; D(nr): 2.0mm; D(rope): 3.0mm; D(wire): 1.8mm; D(term): 11.2mm; L: 150.2mm

F.207: Copper alloy torc (Pl. 14.32)
MSCC: (7C(2P))R
BM: 1991,0702.15; Jackson no.: 14
Fragment of copper alloy multi-strand torc, comprising one plain cast torus terminal with simple collar and part of the neck-ring, irregularly broken at the other end. Stage III construction originally formed from seven ropes coiled together around a hollow core, each rope made up of two circular-section wires plied together. Only four ropes now survive.
Wt: 113.5g; D(rope): 5.0mm; D(wire): 2.4mm; D(term): 30.4mm; L: 112.1mm

F.208: Copper alloy bracelet (Pl. 14.32)
MSCC: (2P)T
BM: 1991,0702.52; Jackson no.: 342, 403
Copper alloy multi-strand bracelet in two pieces, reconstructed from fragments. Double-loop terminals: one is continuous, where the wire is bent back on itself, while the other terminal has open loops formed by the two ends of the single doubled-back wire. Stage II construction of two loosely twisted square-section wires loosely plied together. Very similar to F.209 but these pieces do not appear to be part of the same object.
Wt: 11.5g; D(nr): 6.0mm; D(wire): 2.3mm; D(term): 11.0mm; L: 53.0 mm (max.)

F.209: Copper alloy bracelet (Pl. 14.32)
MSCC: (2P)T
BM: 1991,0702.53; Jackson no.: 272–4, 340–1, 343–5
Three fragments of copper alloy multi-strand bracelet, reconstructed. The one remaining terminal is a single loop formed from the end of a body wire. Probably originally Stage II construction with two loosely twisted wires loosely plied together, though only one wire and a small part of the second now remains.
Very similar to F.208 but these pieces do not appear to be part of the same object.
Wt: 7.7g; D(wire): 2.6mm; L: 51.5 mm (max.)

F.210: Copper alloy torc/bracelet (Pl. 14.32)
BM: 1991,0702.224; Jackson no.: 448
Short length of circular-section copper alloy wire, ending in a loop. Perhaps part of the loop terminal of a multi-strand torc or bracelet.
Wt: 1.0g; D(wire): 2.5mm; D(term): 10.2mm; L: 17.5mm

F.211: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (2P)R
BM: 1991,0702.81; Jackson no.: 145
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends and slightly bent/distorted. Stage II construction of two circular-section wires plied together.
Wt: 4.9g; D(nr): 4.6mm; D(wire): 2.2mm; L: 46.3mm

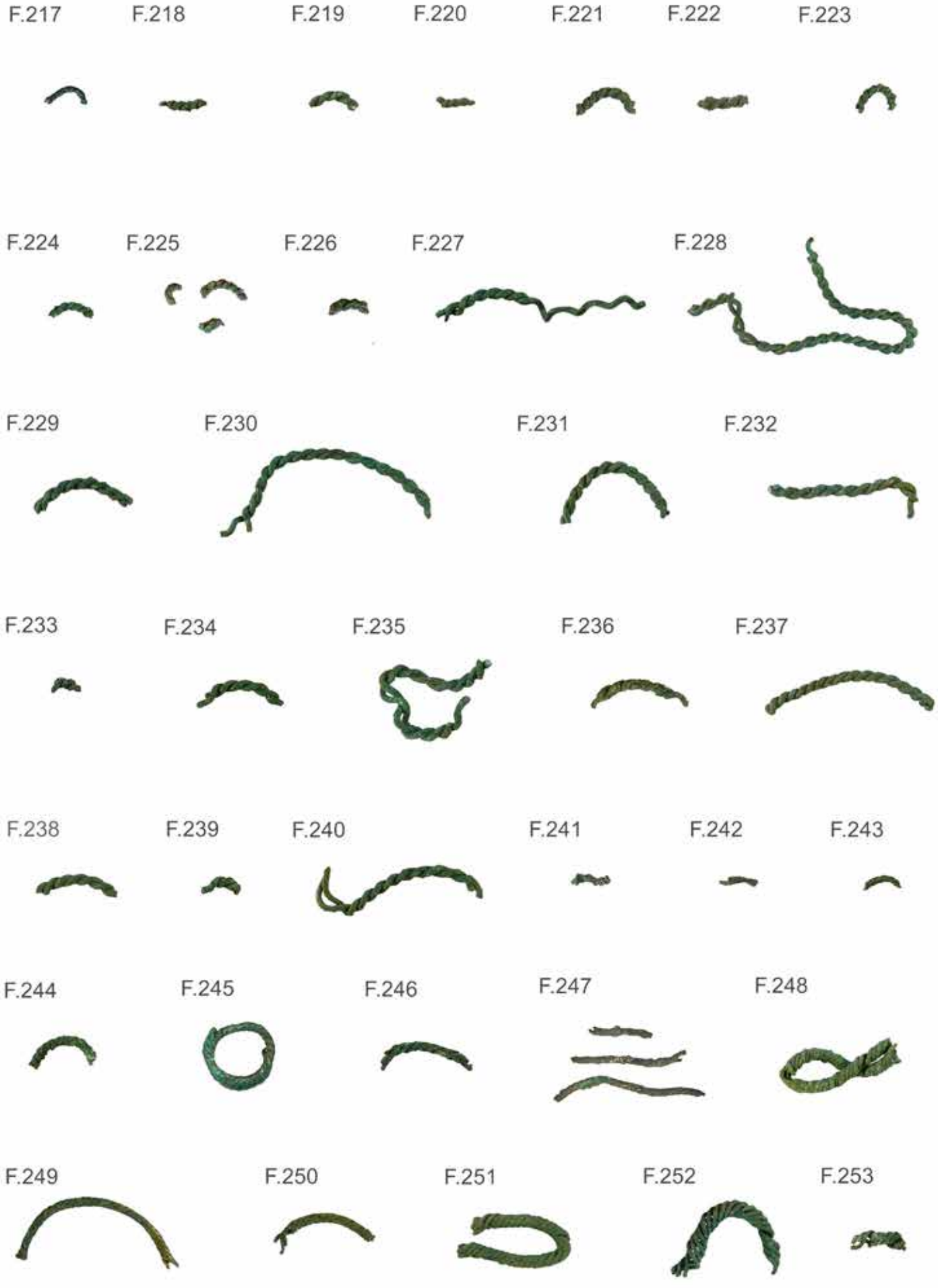
F.212: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (2P)R
BM: 1991,0407.44.b; Site code: SN/AD
Context details: Hoard F pit; Excavated find, surface trowelling.
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends and slightly curved. Stage II construction of two circular-section wires plied together.
Wt: 0.5g; D(nr): 2.1mm; D(wire): 0.7mm; L: 29.7mm

F.213: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (2P)R
BM: 1991,0407.45.f; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Sixteen fragments of copper alloy multi-strand torc or bracelet, each consisting of a short length of neck-ring/body, broken at both ends. Stage II construction of two circular-section wires plied together. Most of the fragments are bent or curved. In three cases, only one wire remains.
Wt: 2.5g; D(nr): 1.6mm; D(wire): 0.7mm; L: 25.8 mm (max.)

F.214: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (2P)R
BM: 1991,0407.65.d; Site code: SN/AG
Context details: Hoard F pit; Excavated find, within hoard pit, down to bottom.
Two fragments of copper alloy multi-strand torc or bracelet, each consisting of a short length of neck-ring/body, broken at both ends. Stage II construction of two circular-section wires plied together. The fragments are slightly curved. In one case, only one wire remains.
Wt: 0.2g; D(nr): 1.9mm; D(wire): 0.9mm; L: 12.8 mm (max.)

F.215: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (?C(2P))R
BM: 1991,0702.73; Jackson no.: 268, 415, 422, 424, 426, 429, 430, 432–5, 437, 440–1, 445–6, 469–70
Eighteen non-joining fragments of copper alloy torc neck-ring or bracelet body, each broken at both ends; most are curved or bent. Stage II construction of two circular-section wires plied together. It is possible the curved fragments could be part of a larger Stage III coiled construction.
Wt: 6.1g; D(nr): 2.0mm; D(wire): 0.9mm; L: 30.3 mm (max.)

F.216: Copper alloy torc/bracelet (Pl. 14.32)
MSCC: (2P)R
BM: 1991,0702.213; Jackson no.: 393
Fragment of copper alloy multi-strand torc neck-ring or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F.246
F.247
F.248
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F.250
F.251
F.252
F.253
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10cm

Plate 14.33

bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together.
Wt: 1.7g; D(nr): 2.9mm; D(wire): 1.5mm; L: 38.3mm

F.217: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (?C)T
BM: 1991,0702.276; Site code: SN/AC
Context details: Hoard F pit; Excavated find, surface trowelling.
Fragment of copper alloy twisted wire, perhaps from a multi-strand torc or bracelet, broken at both ends. The wire is curved in a way which suggests it might once have formed part of a Stage II coiled construction.
Wt: 0.6g; D(wire): 2.4mm; L: 16.5mm

F.218–240: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (2P)R
Fragments of copper alloy multi-strand torc neck-ring or bracelet body, each broken at both ends. Stage II construction of two circular-section wires plied together. These fragments vary somewhat in diameter, but could potentially be part of the same original object, or similar objects.

F.218: BM: 1991,0702.209; Jackson no.: 388
Wt: 0.7g; D(nr): 4.0mm; D(wire): 1.9mm; L: 18.3mm

F.219: BM: 1991,0702.210; Jackson no.: 389
Wt: 1.0g; D(nr): 3.8mm; D(wire): 1.9mm; L: 19.2mm

F.220: BM: 1991,0702.217; Jackson no.: 397
Wt: 0.8g; D(nr): 3.4mm; D(wire): 1.9mm; L: 15.0mm

F.221: BM: 1991,0702.193; Jackson no.: 371
Wt: 1.4g; D(nr): 4.2mm; D(wire): 2.0mm; L: 23.3mm

F.222: BM: 1991,0702.195; Jackson no.: 373
Wt: 1.4g; D(nr): 4.8mm; D(wire): 2.0mm; L: 20.0mm

F.223: BM: 1991,0702.211; Jackson no.: 390
Fragment is curved into a U-shape.
Wt: 1.0g; D(nr): 3.4mm; D(wire): 2.0mm; L: 16.5mm

F.224: BM: 1991,0702.216; Jackson no.: 396
Fragment is curved.
Wt: 0.8g; D(nr): 3.4mm; D(wire): 2.0mm; L: 17.6mm

F.225: BM: 1991,0702.273; Jackson no.: 501b
Three curved fragments.
Wt: 1.7g; D(nr): 4.1mm; D(wire): 2.0mm; L: 18.1 mm (max.)

F.226: BM: 1991,0702.275; Site code: SN/AC
Context details: Hoard F pit; Excavated find, surface trowelling.
Fragment is curved.
Wt: 0.8g; D(nr): 4.7mm; D(wire): 2.0mm; L: 15.4mm

F.227: BM: 1991,0702.78; Jackson no.: 142
Fragment is bent. At one end, the wires are broken at different points, so one is more than twice as long as the other.
Wt: 5.3g; D(nr): 4.4mm; D(wire): 2.1mm; L: 81.0mm

F.228: BM: 1991,0702.77; Jackson no.: 140
Fragment is bent into a V-shape.
Wt: 14.0g; D(nr): 4.2mm; D(wire): 1.7mm; L: 89.6mm

F.229: BM: 1991,0702.190; Jackson no.: 368
Wt: 3.2g; D(nr): 4.4mm; D(wire): 2.1mm; L: 38.1mm

F.230: BM: 1991,0702.79; Jackson no.: 143
Fragment is slightly bent/distorted and partially untwisted at one end.
Wt: 8.7g; D(nr): 4.3mm; D(wire): 2.2mm; L: 81.9mm

F.231: BM: 1991,0702.185; Jackson no.: 363
Fragment is bent into a U-shape.
Wt: 4.5g; D(nr): 4.5mm; D(wire): 2.2mm; L: 42.8mm

F.232: BM: 1991,0702.186; Jackson no.: 364
Wt: 5.2g; D(nr): 4.7mm; D(wire): 2.2mm; L: 57.9mm

F.233: BM: 1991,0702.196; Jackson no.: 374
Wt: 0.5g; D(nr): 4.4mm; D(wire): 2.2mm; L: 11.8mm

F.234: BM: 1991,0702.189; Jackson no.: 367
Fragment is slightly curved.
Wt: 2.7g; D(nr): 4.4mm; D(wire): 2.3mm; L: 33.8mm

F.235: BM: 1991,0702.192; Jackson no.: 370
Fragment is bent and distorted into an irregular open loop.
Wt: 7.4g; D(nr): 4.3mm; D(wire): 2.3mm; L: 43.5mm

F.236: BM: 1991,0702.201; Jackson no.: 379
Wt: 2.8g; D(nr): 4.4mm; D(wire): 2.3mm; L: 37.8mm

F.237: BM: 1991,0702.187; Jackson no.: 365
Fragment is slightly curved.
Wt: 5.7g; D(nr): 4.4mm; D(wire): 2.4mm; L: 65.6mm

F.238: BM: 1991,0702.191; Jackson no.: 369
Fragment is slightly curved.
Wt: 2.5g; D(nr): 4.4mm; D(wire): 2.4mm; L: 31.6mm

F.239: BM: 1991,0702.197; Jackson no.: 375
Fragment is slightly curved.
Wt: 0.7g; D(nr): 4.6mm; D(wire): 2.4mm; L: 15.3mm

F.240: BM: 1991,0702.188; Jackson no.: 366
Fragment is curved. The wires are separated at one end, as if they have been pulled apart.
Wt: 6.2g; D(nr): 4.4mm; D(wire): 2.6mm; L: 64.8mm

F.241: Copper alloy torc/bracelet (Pl. 14.33)
Found inside F.43 during conservation.
MSCC: (?P(2P))R
BM: 1991,0702.19
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of two circular-section wires plied together. The fragment is curved in a way which suggests it could have originally formed part of a Stage III plied construction.
Wt: 0.5g; D(nr): 3.1mm; D(wire): 2.0mm; L: 15.0mm

F.242: Copper alloy wire/?torc/?bracelet (Pl. 14.33)
MSCC: (?2P)R
BM: 1991,0702.223; Jackson no.: 444
Two lengths of circular-section copper alloy wire loosely plied together, broken at both ends. These may originally have formed part of a torc neck-ring or bracelet body with Stage II plied construction.
Wt: 0.4g; D(nr): 3.2mm; D(wire): 1.1mm; L: 15.5mm

F.243: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (3P)R
BM: 1991,0702.142; Jackson no.: 270
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of three circular-section wires plied together.
Wt: 0.5g; D(nr): 2.8mm; D(wire): 0.8mm; L: 14.5mm

F.244: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (?C(3P))R
BM: 1991,0702.194; Jackson no.: 372
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of three circular-section wires plied together. The fragment is curved in a way which suggests it could have originally formed part of a Stage III coiled construction.
Wt: 1.5g; D(nr): 3.6mm; D(wire): 1.4mm; L: 26.0mm

F.245: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (3P)R
BM: 1991,0702.57; Jackson no.: 261
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends and bent into a ring, perhaps suggesting that it was originally part of an interlinked group. Stage II construction of three circular-section wires plied together.
Wt: 7.5g; D(ext): 28.8mm; D(nr): 3.8mm; D(wire): 2.1mm

F.246: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (4P)T
BM: 1991,0702.180; Jackson no.: 358
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of four twisted wires plied together.
Wt: 2.1g; D(nr): 3.6mm; D(wire): 1.5mm; L: 35.4mm

F.247: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (4P)R
BM: 1991,0702.60; Jackson no.: 401, 406, 413
Three fragments of copper alloy torc neck-ring or bracelet body, with Stage II construction of four circular-section wires plied together. Each fragment is broken at both ends.
Wt: 5.5g; D(nr): 3.0mm; D(wire): 1.2mm; L: 57.4 mm (max.)

F.248: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (5C)3P+2T
BM: 1991,0702.175; Jackson no.: 352
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of five wires coiled together around a hollow core. Two of the wires are twisted and the other three are circular-section. The whole fragment has been bent and twisted into a loop or rough figure of eight, perhaps suggesting that it was originally part of an interlinked group.
Wt: 10.7g; D(nr): 4.9mm; D(wire): 1.4mm; L: 47.3mm

F.249: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (5C)T
BM: 1991,0702.141; Jackson no.: 264
Fragment of copper alloy multi-strand torc or bracelet, comprising one plain, slightly expanded buffer terminal and a length of neck-ring/body, broken at the other end. Stage II construction of five twisted wires coiled together.
Wt: 4.7g; D(nr): 3.5mm; D(wire): 1.0mm; D(term): 4.8mm; L: 63.8mm

F.250: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (5C)T
BM: 1991,0702.181; Jackson no.: 359
[Analysed: see Ch. 17]
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends and slightly curved (see **Figs 17.56, 20.28**). Stage II construction of five twisted wires coiled together around a hollow core. Very damaged at one end, and untwisted at the other.
Wt: 2.5g; D(nr): 3.6mm; D(wire): 1.6mm; L: 39.2mm

F.251: ?Composite group (inserted): Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (5C)T
BM: 1991,0702.173; Jackson no.: 350
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at one end and cut at the other. Stage II construction of five twisted wires coiled together around a hollow core. An extra wire has been pushed into the central void. The whole fragment is bent into a narrow U-shape.
Wt: 10.8g; D(nr): 4.9mm; D(wire): 1.5mm; L: 44.3mm

F.252: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (?5C)T
BM: 1991,0702.174; Jackson no.: 351
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of five twisted wires coiled together around a hollow core. The twist is loose, suggesting that one wire may be missing from the original construction. The whole fragment is bent into a U-shape.
Wt: 6.8g; D(nr): 6.7mm; D(wire): 1.5mm; L: 42.8mm

F.253: Copper alloy torc/bracelet (Pl. 14.33)
MSCC: (?5C)T
BM: 1991,0702.183; Jackson no.: 361
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of five twisted wires coiled together around a hollow core. The twist is loose, suggesting that one wire may be missing from the original construction.
Wt: 2.0g; D(nr): 7.2mm; D(wire): 1.6mm; L: 22.8mm

F.254: Copper alloy torc/bracelet (Pl. 14.34)
MSCC: (?5C)T
BM: 1991,0702.176; Jackson no.: 354
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of five twisted wires coiled together around a hollow core. The twist is loose, suggesting that one wire may be missing from the original construction.
Wt: 2.6g; D(nr): 6.8mm; D(wire): 2.2mm; L: 29.9mm

F.255: Copper alloy torc/bracelet (Pl. 14.34)
MSCC: (6C)R
BM: 1991,0702.58; Jackson no.: 254
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, raggedly broken at both ends and bent into a U-shape. Stage II construction of six circular-section wires coiled around a hollow core.
Wt: 11.2g; D(nr): 4.5mm; D(wire): 1.2mm; L: 60.2mm

F.256–61: Copper alloy torc/bracelet (Pl. 14.34)
MSCC: (6C)T
Fragments of copper alloy multi-strand torc or bracelet with Stage II construction of six twisted wires coiled together around a hollow core. The diameters vary slightly, but these fragments could be part of the same or similar object(s).

F.256: BM: 1991,0702.184; Jackson no.: 362
Fragment comprising one simple loop terminal (continuous with two of the neck-ring wires) and a short length of neck-ring/body, broken at the other end. The fragment has been bent into a penannular ring, perhaps suggesting that it was originally part of an interlinked group.
Wt: 4.8g; D(nr): 5.2mm; D(wire): 1.2mm; D(term): 6.6mm; L: 25.5mm

F.257: BM: 1991,0702.178; Jackson no.: 356
Fragment broken at both ends and curved.
Wt: 3.4g; D(nr): 7.1mm; D(wire): 1.2mm; L: 28.1mm

F.258: BM: 1991,0702.179; Jackson no.: 357
Fragment broken at one end and cut at the other.
Wt: 3.6g; D(nr): 6.8mm; D(wire): 1.2mm; L: 29.9mm

F.259: BM: 1991,0702.23; Jackson no.: 114
Fragment cut at one end, broken at the other, and curved. Associated organic material (perhaps part of an original organic core or repair) also recovered.
Wt: 14.1g; D(nr): 5.7mm; D(wire): 1.4mm; L: 84.2mm

F.260: BM: 1991,0702.93; Jackson no.: 162
Fragment broken at both ends and curved.
Wt: 8.3g; D(nr): 6.9mm; D(wire): 1.5mm; L: 55.8mm

F.261: BM: 1991,0702.177; Jackson no.: 355
Fragment broken at both ends (very irregularly in one case) and curved.
Wt: 2.9g; D(nr): 7.3mm; D(wire): 1.5mm; L: 34.4mm

F.262: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)R
BM: 1991,0702.154; Jackson no.: 301
Short fragment of circular-section copper alloy wire, broken at both ends. Bent in such a way as to suggest that it might originally have formed part of a Stage II construction in a multi-strand torc or bracelet.
Wt: 0.1g; D(wire): 0.8mm; L: 11.9mm

F.263: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)R
BM: 1991,0702.153; Jackson no.: 300
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II construction in a multi-strand torc or bracelet.
Wt: 0.2g; D(wire): 1.1mm; L: 12.9mm

F.264: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)R
BM: 1991,0702.248; Jackson no.: 474
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II construction in a multi-strand torc or bracelet.
Wt: 0.7g; D(wire): 2.3mm; L: 17.9mm

F.265–6: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)Q
Short fragments of square-section copper alloy wire, each broken at both ends. Curved in such a way as to suggest that they might originally have formed part of a Stage II construction in a multi-strand torc or bracelet. The gauge of the wires is similar, although not identical, and these could originally have been part of the same object.

F.265: BM: 1991,0702.151; Jackson no.: 298
Wt: 0.1g; D(wire): 1.0mm; L: 5.2mm

F.266: BM: 1991,0702.152; Jackson no.: 299
Wt: 0.1g; D(wire): 1.1mm; L: 9.3mm

F.267: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)R
BM: 1991,0702.233; Jackson no.: 456
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II construction in a multi-strand torc or bracelet.
Wt: 0.8g; D(wire): 2.3mm; L: 21.7mm

F.268: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)R
BM: 1991,0702.263; Jackson no.: 489

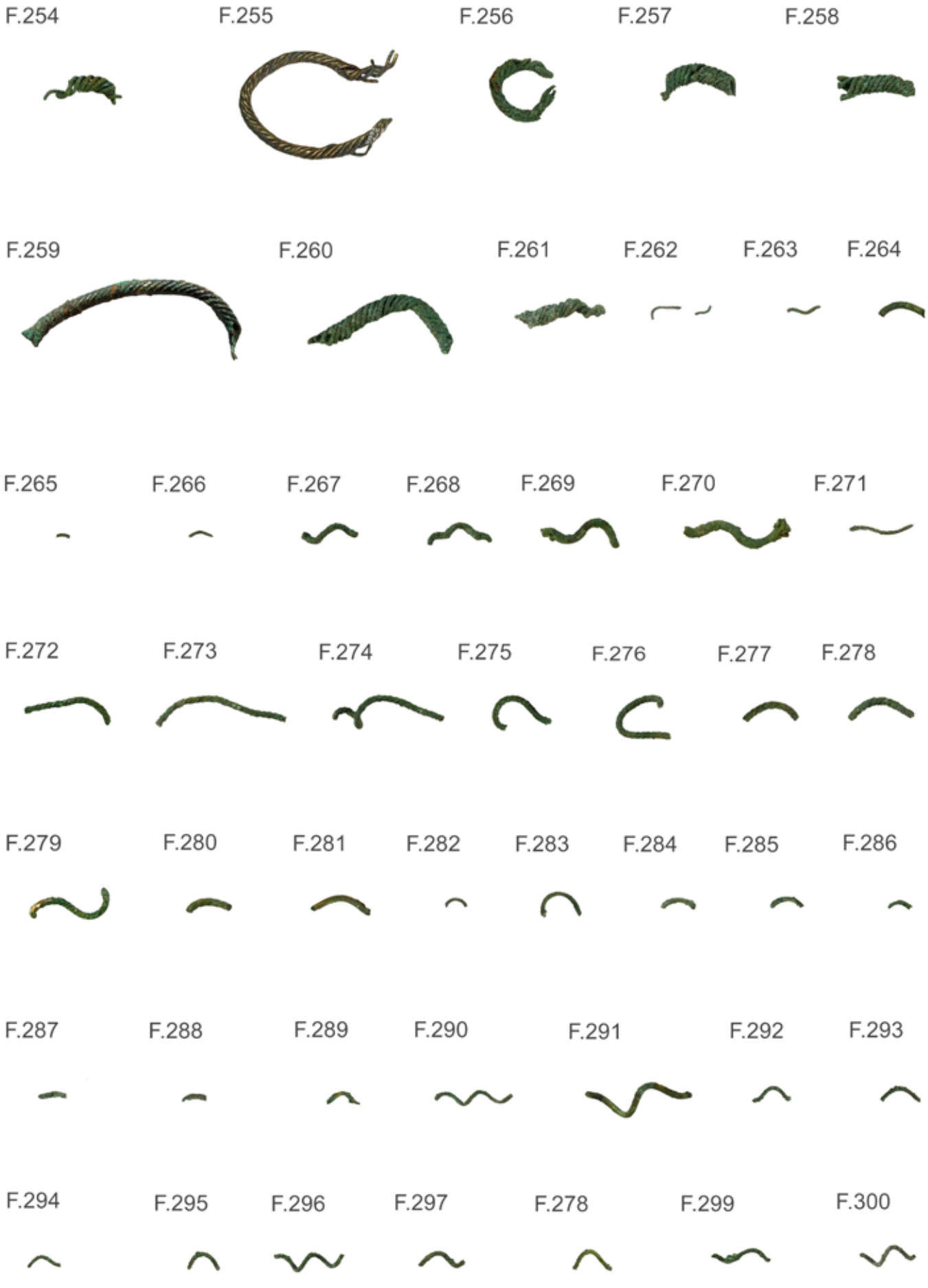
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Plate 14.34

Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II construction in a multi-strand torc or bracelet.
Wt: 0.9g; D(wire): 2.6mm; L: 24.3mm

F.269: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)R
BM: 1991,0702.232; Jackson no.: 455
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II construction in a multi-strand torc or bracelet.
Wt: 3.0g; D(wire): 3.4mm; L: 30.0mm

F.270: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)R
BM: 1991,0702.231; Jackson no.: 454
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II construction in a multi-strand torc or bracelet.
Wt: 4.3g; D(wire): 3.6mm; L: 40.4mm

F.271–80: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (??)T
Short fragments of twisted copper alloy wire, broken at both ends unless otherwise stated. Curved in such a way as to suggest that they might originally have formed part of a Stage II construction in a multi-strand torc or bracelet. The wire gauges vary somewhat, but these fragments could originally have been part of the same or similar objects.
F.271: BM: 1991,0702.253; Jackson no.: 479
Wt: 0.3g; D(wire): 1.2mm; L: 24.2mm

F.272: BM: 1991,0702.238; Jackson no.: 461
Wt: 1.0g; D(wire): 2.2mm; L: 32.5mm

F.273: BM: 1991,0702.235; Jackson no.: 458
Wt: 1.7g; D(wire): 2.3mm; L: 49.3mm

F.274: BM: 1991,0702.237; Jackson no.: 460
Wt: 2.0g; D(wire): 2.4mm; L: 42.1mm

F.275: BM: 1991,0702.234; Jackson no.: 457
Wt: 1.6g; D(wire): 2.5mm; L: 22.9mm

F.276: BM: 1991,0702.236; Jackson no.: 459
Wt: 2.2g; D(wire): 2.5mm; L: 20.8mm

F.277: BM: 1991,0702.242; Jackson no.: 465
Wt: 1.0g; D(wire): 2.5mm; L: 21.1mm

F.278: BM: 1991,0702.230; Jackson no.: 453
Wt: 1.3g; D(wire): 2.7mm; L: 25.0mm

F.279: BM: 1991,0702.241; Jackson no.: 464
Wt: 1.6g; D(wire): 2.7mm; L: 30.9mm

F.280: BM: 1991,0702.240; Jackson no.: 463
Fragment is broken at one end and cut at the other.
Wt: 0.5g; D(wire): 2.8mm; L: 17.1mm

F.281: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (?C)R
BM: 1991,0702.266; Jackson no.: 492
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet.
Wt: 0.9g; D(wire): 2.2mm; L: 22.6mm

F.282: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (?C)R
BM: 1991,0407.45.g; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet.
Wt: 0.1g; D(wire): 0.9mm; L: 8.4mm

F.283–8: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (?C)R
Short fragments of circular-section copper alloy wire, each broken at both ends. Curved in such a way as to suggest that they might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet, or could possibly be part of a loop terminal. The wire gauges vary somewhat, but these fragments could originally have been part of the same or similar objects.
BM: 1991,0702.256; Jackson no.: 482
Wt: 0.4g; D(wire): 1.5mm; L: 15.4mm

F.284: BM: 1991,0702.264; Jackson no.: 490
Wt: 0.2g; D(wire): 1.5mm; L: 13.2mm

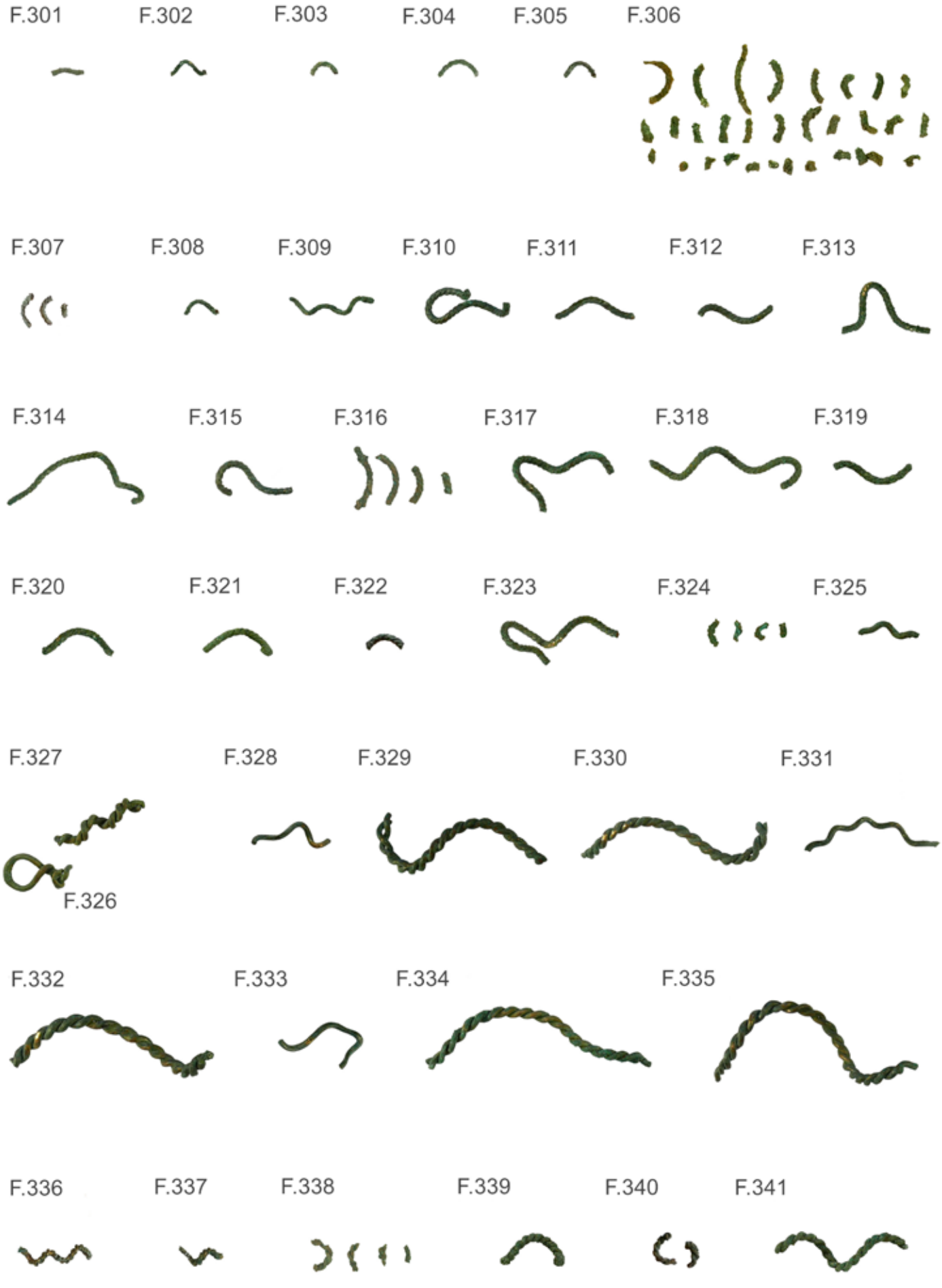
F.285: BM: 1991,0702.268; Jackson no.: 494
Wt: 0.2g; D(wire): 1.5mm; L: 12.5mm

F.286: BM: 1991,0702.270; Jackson no.: 496
Wt: 0.1g; D(wire): 1.5mm; L: 9.5mm

F.287: BM: 1991,0702.267; Jackson no.: 493
Wt: 0.1g; D(wire): 1.7mm; L: 10.7mm

F.288: BM: 1991,0702.269; Jackson no.: 495
Wt: 0.1g; D(wire): 2.0mm; L: 9.3mm

F.289–90: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (?C)R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F.302
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F.306
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F.308
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F.339
F.340
F.341
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Plate 14.35

Short fragments of circular-section copper alloy wire, each broken at both ends. Curved in such a way as to suggest that they might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet.

F.289: BM: 1991,0702.258; Jackson no.: 484
Wt: 0.2g; D(wire): 1.4mm; L: 12.3mm

F.290: BM: 1991,0702.250; Jackson no.: 476
Wt: 0.5g; D(wire): 1.6mm; L: 29.3mm

F.291: Copper alloy wire/?torc/?bracelet (Pl. 14.34)
MSCC: (?C)R
BM: 1991,0702.265; Jackson no.: 491
Short fragment of circular-section copper alloy wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet.
Wt: 2.4g; D(wire): 2.4mm; L: 40.4mm

F.292–309: Copper alloy wire/?torc/?bracelet (Pls 14.34–5)
MSCC: (?C)T
Short fragments of copper alloy twisted wire, each broken at both ends. Curved in such a way as to suggest that they might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet. There is some variation in gauge, but some of these fragments may have been part of the same original object(s).

F.292: BM: 1991,0702.247; Jackson no.: 473
Wt: 0.3g; D(wire): 1.4mm; L: 14.5mm

F.293: BM: 1991,0702.254; Jackson no.: 480
Wt: 0.3g; D(wire): 1.4mm; L: 15.2mm

F.294: BM: 1991,0702.260; Jackson no.: 486
Wt: 0.2g; D(wire): 1.4mm; L: 12.4mm

F.295: BM: 1991,0702.244; Jackson no.: 467
Wt: 0.3g; D(wire): 1.5mm; L: 12.1mm

F.296: BM: 1991,0702.251; Jackson no.: 477
Wt: 0.6g; D(wire): 1.5mm; L: 26.7mm

F.297: BM: 1991,0702.259; Jackson no.: 485
Wt: 0.3g; D(wire): 1.5mm; L: 17.7mm

F.298: BM: 1991,0702.243; Jackson no.: 466
Wt: 0.4g; D(wire): 1.6mm; L: 15.0mm

F.299: BM: 1991,0702.252; Jackson no.: 478
Wt: 0.4g; D(wire): 1.6mm; L: 22.5mm

F.300: BM: 1991,0702.245; Jackson no.: 468
Wt: 0.5g; D(wire): 1.7mm; L: 21.1mm

F.301: BM: 1991,0702.257; Jackson no.: 483
Wt: 0.2g; D(wire): 1.7mm; L: 12.2mm

F.302: BM: 1991,0702.261; Jackson no.: 487
Wt: 0.4g; D(wire): 1.7mm; L: 13.9mm

F.303: BM: 1991,0702.262; Jackson no.: 488
Wt: 0.2g; D(wire): 1.7mm; L: 10.7mm

F.304: BM: 1991,0702.249; Jackson no.: 475
Wt: 0.3g; D(wire): 1.8mm; L: 15.4mm

F.305: BM: 1991,0702.255; Jackson no.: 481
Wt: 0.3g; D(wire): 1.8mm; L: 12.3mm

F.306: BM: 1991,0407.45.d; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Thirty-one fragments.
Wt: 2.4g; D(wire): 1.8mm; L: 27.8 mm (max.)

F.307: BM: 1991,0407.65.c; Site code: SN/AG
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to bottom.
Three fragments,
Wt: 0.4g; D(wire): 1.9mm; L: 13.4 mm (max.)

F.308: BM: 1991,0702.246; Jackson no.: 472
Wt: 0.3g; D(wire): 1.9mm; L: 13.6mm

F.309: BM: 1991,0702.239; Jackson no.: 462
Wt: 0.9g; D(wire): 2.0mm; L: 32.9mm

F.310–23: Copper alloy wire/?torc/?bracelet (Pl. 14.35)
MSCC: (?C)T
Short fragments of copper alloy twisted wire, broken at both ends. Curved in such a way as to suggest that they might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet. F.310–23 are similar in gauge and may originally have been part of the same object.

F.310: BM: 1991,0702.90; Jackson no.: 159
Wt: 2.7g; D(wire): 2.3mm; L: 32.9mm

F.311: BM: 1991,0702.91; Jackson no.: 160
Wt: 2.3g; D(wire): 2.3mm; L: 30.5mm

F.312: BM: 1991,0702.89; Jackson no.: 158
Wt: 2.3g; D(wire): 2.4mm; L: 29.0mm

F.313: BM: 1991,0702.150; Jackson no.: 283
Wt: 2.5g; D(wire): 2.3mm; L: 34.0mm

F.314: BM: 1991,0702.147; Jackson no.: 280
Heavily distorted.
Wt: 2.4g; D(wire): 1.9mm; L: 52.5mm

F.315: BM: 1991,0702.148; Jackson no.: 281
Wt: 1.8g; D(wire): 2.5mm; L: 30.0mm

F.316: BM: 1991,0407.45.c; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Four fragments.
Wt: 2.4g; D(wire): 2.5mm; L: 24.8 mm (max.)

F.317: BM: 1991,0702.145; Jackson no.: 278
Wt: 3.9g; D(wire): 2.6mm; L: 39.0mm

F.318: BM: 1991,0702.146; Jackson no.: 279
Wt: 3.6g; D(wire): 2.6mm; L: 57.4mm

F.319: BM: 1991,0702.149; Jackson no.: 282
Wt: 1.6g; D(wire): 2.6mm; L: 30.8mm

F.320: BM: 1991,0702.143; Jackson no.: 276
Wt: 1.4g; D(wire): 2.7mm; L: 27.7mm

F.321: BM: 1991,0702.229; Jackson no.: 452
Wt: 2.1g; D(wire): 2.7mm; L: 27.0mm

F.322: BM: 1991,0407.44.c; Site code: SN/AD
Context details: Hoard F pit; Excavated find from surface trowelling.
Wt: 0.6g; D(wire): 2.7mm; L: 14.5mm

F.323: BM: 1991,0702.144; Jackson no.: 277
Wt: 4.2g; D(wire): 2.8mm; L: 45.7mm

F.324: Copper alloy wire/?torc/?bracelet (Pl. 14.35)
MSCC: (?C)R
BM: 1991,0407.45.i; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Four fragments of copper alloy circular-section wire, broken at both ends and very heavily corroded. Tightly curved in such a way as to suggest that they might originally have formed part of a Stage II coiled construction in a multi-strand torc or bracelet.
Wt: 0.6g; D(wire): 2.0mm; L: 10.6mm (max.)

F.325: Copper alloy wire/?torc/?bracelet (Pl. 14.35)
MSCC: (?P)R
BM: 1991,0702.198; Jackson no.: 376
Short fragment of copper alloy circular-section wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II plied construction in a multi-strand torc or bracelet.
Wt: 0.9g; D(wire): 2.4mm; L: 23.5mm

F.326–7: Copper alloy torc/bracelet (Pl. 14.35)
MSCC: (?2P(2P))R
F.326 and F.327 join.

F.326: BM: 1991,0702.202; Jackson no.: 381
Fragment of copper alloy multi-strand torc or bracelet, comprising a single-loop terminal (continuous with the neck-ring/body wires) and a short length of neck-ring/body, broken at the other end. What remains is a Stage II component, formed from two circular-section wires plied together. This is curved in a way which suggests it originally formed part of a Stage III construction, most likely of two such ropes plied together, with double-loop terminal.
Wt: 3.1g; D(rope): 3.8mm; D(wire): 1.8mm; D(term): 14.0mm; L: 26.6mm

F.327: BM: 1991,0702.203; Jackson no.: 382
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component, formed from two circular-section wires plied together. This is curved in a way which suggests it originally formed part of a Stage III construction, most likely of two such ropes plied together.
Wt: 3.5g; D(nr): 8.4mm; D(rope): 4.4mm; D(wire): 2.0mm; L: 37.4mm

F.328–35: Copper alloy wire/torc/bracelet (Pl. 14.35)
MSCC: (?C(2P))R
F.328–35 are very similar in gauge and construction and may originally have been part of the same object.

F.328: BM: 1991,0702.105; Jackson no.: 223
Short fragment of copper alloy circular-section wire, broken at both ends. Curved in such a way as to suggest that it might originally have formed part of a Stage II/III plied/coiled construction in a multi-strand torc or bracelet.
Wt: 1.3g; D(wire): 1.9mm; L: 30.4mm

F.329: BM: 1991,0702.101; Jackson no.: 219
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. It is loosely coiled, suggesting it may originally have been part of a Stage III coiled construction.
Wt: 7.2g; D(rope): 4.2mm; D(wire): 1.9mm; L: 65.5mm

F.330: BM: 1991,0702.102; Jackson no.: 220
Description as F.329.
Wt: 6.8g; D(rope): 3.9mm; D(wire): 1.9mm; L: 71.8mm

F.331: BM: 1991,0702.106; Jackson no.: 224
Description as F.328.
Wt: 2.1g; D(wire): 2.1mm; L: 56.3mm

F.332: BM: 1991,0702.107; Jackson no.: 225
Description as F.329.
Wt: 6.5g; D(rope): 4.3mm; D(wire): 2.1mm; L: 78.5mm

F.333: BM: 1991,0702.104; Jackson no.: 222
Description as F.328.
Wt: 1.9g; D(wire): 2.2mm; L: 32.8mm

F.334: BM: 1991,0702.100; Jackson no.: 216
Description as F.329.
Wt: 7.7g; D(rope): 4.3mm; D(wire): 2.3mm; L: 86.7mm

F.335: BM: 1991,0702.103; Jackson no.: 221
Description as F.329.
Wt: 8.4g; D(rope): 4.3mm; D(wire): 2.3mm; L: 78.3mm

F.336–7: Copper alloy torc/bracelet (Pl. 14.35)
MSCC: (?C(2P))R
Fragments of copper alloy multi-strand torc neck-ring or bracelet body, each broken at both ends. What remains are Stage II components of two circular-section wires plied together. They are loosely coiled, suggesting they may originally have been part of a Stage III coiled construction. F.336 and F.337 are possibly part of the same object. F.351 may also be associated.

F.336: BM: 1991,0702.86; Jackson no.: 152
Wt: 1.1g; D(nr): 6.5mm; D(wire): 1.1mm; L: 27.4mm

F.337: BM: 1991,0702.85; Jackson no.: 151
Wt: 1.4g; D(nr): 7.7mm; D(rope): 2.7mm; D(wire): 1.5mm; L: 16.7mm

F.338: Copper alloy torc/bracelet (Pl. 14.35)
MSCC: (?C(2P))R
BM: 1991,0407.45.e; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Four fragments of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends and heavily corroded. What remains are Stage II components of two circular-section wires plied together. They are loosely coiled, suggesting they may originally have been part of a Stage III coiled construction.
Wt: 0.9g; D(rope): 2.6mm; D(wire): 1.3mm; L: 12.1 mm (max.)

F.339: Copper alloy torc/bracelet (Pl. 14.35)
MSCC: (?C(2P))R
BM: 1991,0702.200; Jackson no.: 378
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. It is loosely coiled, suggesting it may originally have been part of a Stage III coiled construction.
Wt: 2.0g; D(rope): 3.5mm; D(wire): 1.4mm; L: 24.7mm

F.340: Copper alloy torc/bracelet (Pl. 14.35)
MSCC: (?C(2P))R
BM: 1991,0407.65.b; Site code: SN/AG
Context details: Hoard F pit; Excavated find, within hoard pit, down to bottom.
Two fragments of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains are Stage II components of two circular-section wires plied together. They are loosely coiled, suggesting they may originally have been part of a Stage III coiled construction.
Wt: 0.9g; D(rope): 2.6mm; D(wire): 1.5mm; L: 12.7 mm (max.)

F.341: Copper alloy torc/bracelet (Pl. 14.35)
MSCC: (?C(2P))R
BM: 1991,0702.207; Jackson no.: 386
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. It is loosely coiled, suggesting it may originally have been part of a Stage III coiled construction.
Wt: 3.4g; D(nr): 16.3mm; D(rope): 3.7mm; D(wire): 1.6mm; L: 51.1mm

F.342: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?C(2P))R
BM: 1991,0702.218; Jackson no.: 398
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. It is loosely coiled, suggesting it may originally have been part of a Stage III coiled construction.
Wt: 4.0g; D(rope): 3.4mm; D(wire): 1.7mm; L: 52.3mm

F.343: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?C(2P))R
BM: 1991,0702.206; Jackson no.: 385
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. It is loosely coiled, suggesting it may originally have been part of a Stage III coiled construction.
Wt: 1.8g; D(rope): 3.9mm; D(wire): 1.8mm; L: 25.5mm

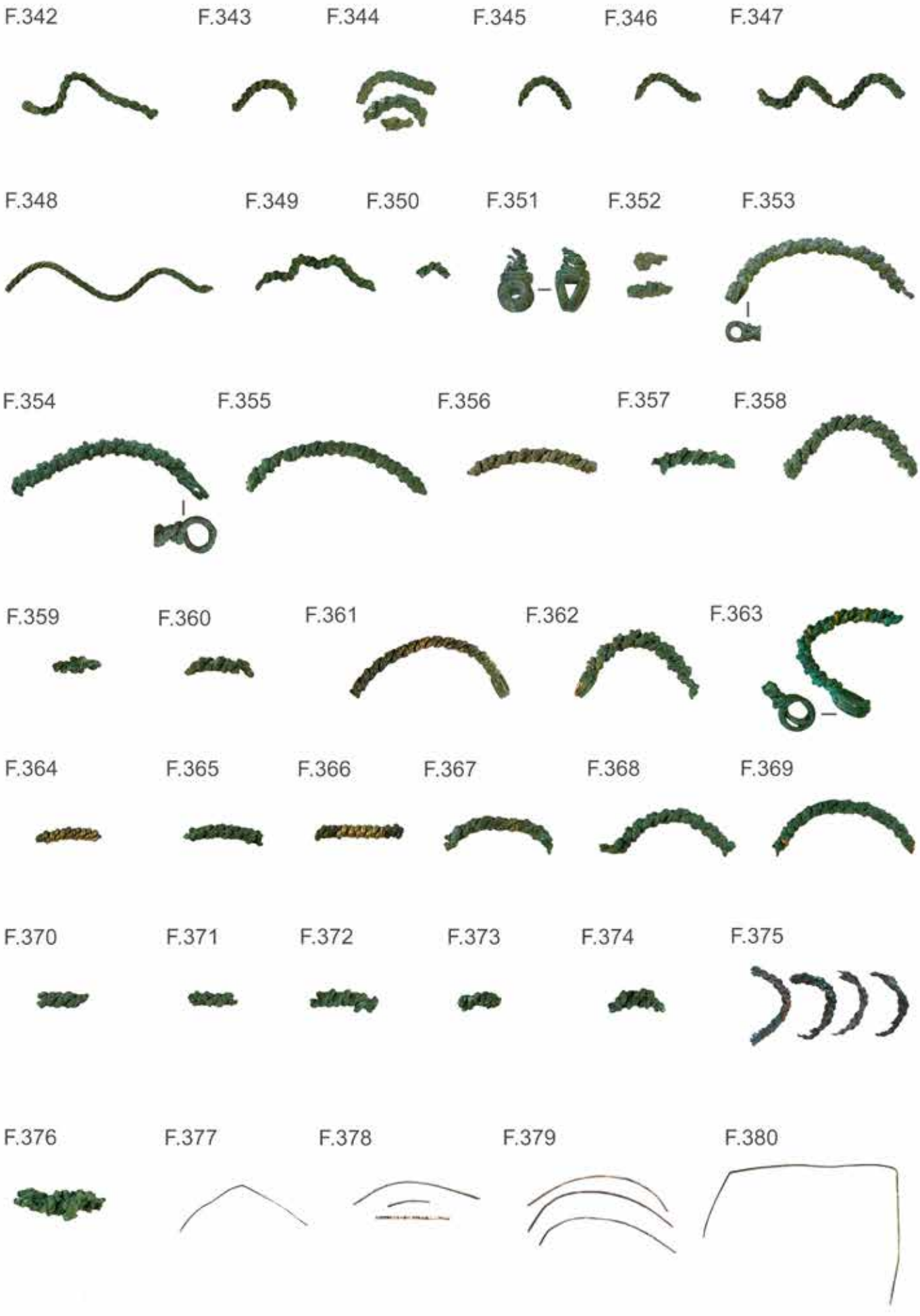
F.344: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?C(2P))R
BM: 1991,0407.45.b; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Three fragments of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains are Stage II components of two circular-section wires plied together. They are loosely coiled, suggesting they may originally have been part of a Stage III coiled construction.
Wt: 2.8g; D(rope): 4.1mm; D(wire): 1.9mm; L: 24.7mm (max.)

F.345–6: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?C(2P))R
Fragments of copper alloy multi-strand torc neck-ring or bracelet body, each broken at both ends. What remains are Stage II components of two circular-section wires plied together. They are loosely coiled, suggesting they may originally have been part of a Stage III coiled construction. The gauges of F.345 ad F.346 are similar, and they may originally have been part of the same object.

F.345: BM: 1991,0702.214; Jackson no.: 394
Wt: 1.6g; D(rope): 3.5mm; D(wire): 2.0mm; L: 19.9mm

F.346: BM: 1991,0702.208; Jackson no.: 387
Wt: 1.4g; D(rope): 3.3mm; D(wire): 2.0mm; L: 23.8mm

F.347: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?C(2P))R
BM: 1991,0702.199; Jackson no.: 377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F.380
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Plate 14.36

Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends and very damaged in the centre. What remains is a Stage II component of two circular-section wires plied together. It is loosely coiled, suggesting it may originally have been part of a Stage III coiled construction.
Wt: 4.3g; D(rope): 4.3mm; D(wire): 2.1mm; L: 57.2mm

F.348: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?C(3P))R
BM: 1991,0702.222; Jackson no.: 414
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends (one break perhaps recent). What remains is a Stage II component of three circular-section wires plied together. It is loosely coiled, suggesting it may originally have been part of a Stage III coiled construction.
Wt: 3.8g; D(rope): 2.5mm; D(wire): 1.4mm; L: 80.4mm

F.349: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?P(2P))R
BM: 1991,0702.80; Jackson no.: 144
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. It is curved in a way which suggests it may originally have been part of a Stage III plied construction.
Wt: 4.7g; D(nr): 7.7mm; D(rope): 3.5mm; D(wire): 1.5mm; L: 46.1mm

F.350: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?P(2P))R
BM: 1991,0702.215; Jackson no.: 395
Fragment of copper alloy multi-strand torc neck-ring or bracelet body, broken at both ends. What remains is a Stage II component of two circular-section wires plied together. It is curved in a way which suggests it may originally have been part of a Stage III plied construction.
Wt: 0.8g; D(rope): 3.3mm; D(wire): 1.7mm; L: 13.3mm

F.351: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (4C(2P))R
BM: 1991,0702.87; Jackson no.: 153
Fragment of copper alloy multi-strand torc or bracelet, comprising a torus terminal and short protruding fragments of neck-ring/body wires. The terminal is composed of two plano-convex discs with a small central perforation. At the neck-ring/body end, their bases rest on opposite edges of a buffer-terminal-like plate with grooved cordon around the edge, while their tops touch. Stage III construction of four ropes coiled around a hollow core, each rope formed from two circular-section wires plied together.
May be part of the same object as F.336–7.
Wt: 13.7g; D(nr): 9.3mm; D(rope): 2.7mm; D(wire): 1.1mm; D(term): 15.0mm; L: 27.5mm

F.352–60: Copper alloy torc (Pl. 14.36)
MSCC: (2P(2P))R
F.352–60 are most likely part of the same torc.

F.352: BM: 1991,0407.45.a; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Two heavily corroded fragments of copper alloy Stage III multi-strand torc neck-ring, each broken at both ends. Cable formed from two ropes plied together, each of which is made up of two circular-section wires which are themselves plied together.
Wt: 2.8g; D(nr): 5.7mm; D(rope): 3.1mm; D(wire): 1.9mm; L: 17.9 mm (max.)

F.353: BM: 1991,0702.109; Jackson no.: 227
Fragment of copper alloy multi-strand Stage III torc, comprising one double-loop terminal (an open loop formed from the end of one of the neck-ring ropes) and a short length of neck-ring, broken at the other end. Cable formed from two ropes plied together, each of which is made up of two circular-section wires plied together.
Wt: 10.7g; D(nr): 6.0mm; D(rope): 3.1mm; D(wire): 2.1mm; D(term): 8.3mm; L: 74.0mm

F.354: BM: 1991,0702.110; Jackson no.: 228
Fragment of copper alloy multi-strand torc, comprising one double-loop terminal and a short length of neck-ring, broken at the other end. The Stage III neck-ring is formed from two ropes plied together. Each rope is formed from two circular-section wires plied together. Each terminal loop is continuous, extending to form one of the neck-ring ropes.
Wt: 12.4g; D(nr): 7.3mm; D(rope): 3.5mm; D(wire): 1.9mm; D(term): 16.0mm; L: 75.9mm

F.355: BM: 1991,0702.108; Jackson no.: 226
Fragment of copper alloy multi-strand Stage III torc neck-ring, broken at both ends. Cable formed from two ropes plied together, each of which is made up of two circular-section wires plied together.
Wt: 9.2g; D(nr): 5.3mm; D(rope): 3.0mm; D(wire): 1.8mm; L: 70.0mm

F.356: BM: 1991,0702.113; Jackson no.: 231
Description as F.355.
Wt: 5.6g; D(nr): 6.3mm; D(rope): 3.6mm; D(wire): 1.3mm; L: 50.3mm

F.357: BM: 1991,0702.114; Jackson no.: 232
Description as F.355.
Wt: 3.7g; D(nr): 6.1mm; D(rope): 3.0mm; D(wire): 1.6mm; L: 32.6mm

F.358: BM: 1991,0702.115; Jackson no.: 233
Description as F.355.
Wt: 8.9g; D(nr): 5.9mm; D(rope): 2.7mm; D(wire): 1.7mm; L: 52.0mm

F.359: BM: 1991,0702.118; Jackson no.: 237
Description as F.355.
Wt: 1.3g; D(nr): 6.2mm; D(rope): 4.0mm; D(wire): 2.0mm; L: 18.8mm

F.360: BM: 1991,0702.119; Jackson no.: 238
Description as F.355.
Wt: 2.8g; D(nr): 7.2mm; D(rope): 3.5mm; D(wire): 1.7mm; L: 27.7mm

F.361: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (2P(2P))R
BM: 1991,0702.84; Jackson no.: 150
[Analysed: see Ch. 17]
Fragment of copper alloy multi-strand torc or bracelet, comprising one triple-loop terminal and a length of Stage III neck-ring/body, broken at the other end (see **Figs 17.37–8, 17.54**). Cable formed from two ropes plied together, each rope made up of two circular-section wires plied together. One of the ropes forms a continuous single loop of the terminal, while the other forms a continuous double loop.
Wt: 10.2g; D(nr): 4.9mm; D(rope): 2.7mm; D(wire): 1.3mm; D(term): 8.8mm; L: 62.0mm

F.362–3: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (2P(2P))R
Fragments of copper alloy multi-strand torc or bracelet, each comprising one double-loop terminal and a length of Stage III neck-ring/body, broken at the other end. Cable formed from two ropes plied together, each rope made up of two circular-section wires plied together. Each rope forms one of the continuous terminal loops. The fragments are each bent into a U-shape. F.362–3 may be part of the same object.

F.362: BM: 1991,0702.160; Jackson no.: 327
Wt: 9.2g; D(nr): 6.7mm; D(rope): 3.1mm; D(wire): 1.2mm; D(term): 10.3mm; L: 48.5mm

F.363: BM: 1991,0702.82; Jackson no.: 148
Wt: 12.2g; D(nr): 5.7mm; D(rope): 3.2mm; D(wire): 1.7mm; D(term): 14.1mm; L: 44.2mm

F.364–74: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (2P(2P))R
Fragments of copper alloy multi-strand Stage III torc neck-ring or bracelet body, each broken at both ends. Cable formed from two ropes plied together, each of which is made up of two circular-section wires plied together. F.364–74 may be part of the same object.

F.364: BM: 1991,0702.162; Jackson no.: 329
Wt: 2.7g; D(nr): 4.8mm; D(rope): 2.6mm; D(wire): 1.0mm; L: 25.6mm

F.365: BM: 1991,0702.163; Jackson no.: 330
Wt: 3.2g; D(nr): 5.6mm; D(rope): 3.0mm; D(wire): 1.2mm; L: 30.8mm

F.366: BM: 1991,0702.83; Jackson no.: 149
Wt: 4.7g; D(nr): 5.1mm; D(rope): 2.6mm; D(wire): 1.3mm; L: 34.5mm

F.367: BM: 1991,0702.155; Jackson no.: 321
Wt: 5.1g; D(nr): 5.1mm; D(rope): 2.7mm; D(wire): 1.4mm; L: 42.1mm

F.368: BM: 1991,0702.159; Jackson no.: 326
One break may be recent. The other end is hammered and distorted.
Wt: 6.9g; D(nr): 6.0mm; D(rope): 3.1mm; D(wire): 1.4mm; L: 53.0mm

F.369: BM: 1991,0702.165; Jackson no.: 332
Wt: 7.5g; D(nr): 5.6mm; D(rope): 2.9mm; D(wire): 1.5mm; L: 55.5mm

F.370: BM: 1991,0702.166; Jackson no.: 333
Wt: 1.9g; D(nr): 6.3mm; D(rope): 3.6mm; D(wire): 1.7mm; L: 20.0mm

F.371: BM: 1991,0702.170; Jackson no.: 337
Wt: 1.6g; D(nr): 5.9mm; D(rope): 2.9mm; D(wire): 1.7mm; L: 19.0mm

F.372: BM: 1991,0702.167; Jackson no.: 334
Wt: 2.7g; D(nr): 6.4mm; D(rope): 3.5mm; D(wire): 1.8mm; L: 23.6mm

F.373: BM: 1991,0702.171; Jackson no.: 338
Wt: 1.7g; D(nr): 6.4mm; D(rope): 3.5mm; D(wire): 1.9mm; L: 17.0mm

F.374: BM: 1991,0702.168; Jackson no.: 335
Wt: 2.4g; D(nr): 8.0mm; D(rope): 3.5mm; D(wire): 2.0mm; L: 22.1mm

F.375: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (?C(3P(2P)))R
BM: 1991,0702.75; Jackson no.: 346, 347, 348, 349
Four non-joining fragments of copper alloy torc neck-ring or bracelet body, each broken at both ends. What remains are Stage III components with cable of three ropes plied together, each rope made up of two circular-section wires plied together. On two of the fragments, only two ropes survive. All the fragments are curved in a way which suggests they may originally have formed part of a Stage IV coiled construction. Very small additional individual wire fragments not photographed.
Wt: 5.7g; D(cable): 3.0mm; D(rope): 2.0mm; D(wire): 1.1mm; L: 30.7mm (max.)

F.376: Copper alloy torc/bracelet (Pl. 14.36)
MSCC: (3P(2P))R
BM: 1991,0702.157; Jackson no.: 323
Fragment of copper alloy multi-strand Stage III torc neck-ring or bracelet body, broken at both ends. Cable formed from three ropes plied together, each of which is made up of two circular-section wires plied together.
Wt: 6.1g; D(nr): 10.3mm; D(rope): 3.8mm; D(wire): 1.8mm; L: 35.3mm

F.377: Gold/silver alloy strip (Pl. 14.36)
BM: 1991,0501.195; Jackson no.: 179
Fragment of thin gold/silver alloy strip, rectangular in cross-section, broken at both ends.
Wt: 0.8g; L: 99.5mm; W: 1.2mm; T: 0.6mm

F.378: Gold/silver alloy strip (Pl. 14.36)
BM: 1991,0501.196; Jackson no.: 181
Three curved fragments of thin gold/silver alloy strip, rectangular in cross-section, broken at both ends and bent into a shallow V-shape. When found, these fragments were corroded together.
Wt: 0.6g; L: 49.1; 29.0; 17.0mm; W: 1.2mm; T: 0.6mm

F.379: Gold/silver alloy strip (Pl. 14.36)
BM: 1991,0501.197; Jackson no.: 182
Three curved fragments of thin gold/silver alloy strip, rectangular in cross-section, broken at both ends. When found, these fragments were corroded together.
Wt: 1.2g; L: 56.0; 54.0; 53.0mm; W: 1.2mm; T: 0.6mm

F.380: Gold/silver alloy strip (Pl. 14.36)
BM: 1991,0501.218; Jackson no.: 287
[Analysed: see Ch. 17]
Fragment of thin gold/silver alloy strip, rectangular in cross-section, broken at both ends and bent at approximately a right angle at two points to form a squarish U-shape.
Wt: 1.1g; L: 76.3mm; W: 1.4mm; T: 0.5mm

F.381: Gold/silver alloy strip (Pl. 14.37)
BM: 1991,0702.97; Jackson no.: 177
Fragment of thin gold/silver alloy strip, rectangular in cross-section, curved, and broken at both ends.
Wt: 0.3g; L: 47.7mm; W: 1.2mm; T: 0.4mm

F.382: Copper alloy strip (Pl. 14.37)
BM: 1991,0407.45.j; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Four short lengths of copper alloy strip, rectangular in cross-section, each broken at both ends. One is bent into a shallow V-shape.
Wt: 0.5g; L: 30.5mm (max.); W: 1.4mm; T: 0.5mm

F.383: Copper alloy strip (Pl. 14.37)
BM: 1991,0702.98; Jackson no.: 178
Fragment of copper alloy strip with flat rectangular cross-section, curved, and broken at both ends.
Wt: 0.4g; L: 52.7mm; W: 1.2mm; T: 0.5mm

F.384: Copper alloy strip (Pl. 14.37)
BM: 1991,0702.55; Jackson no.: 285
Corroded/fused bundle of six thin copper alloy strips, each rectangular in cross-section, and broken at both ends. The bundle is bent at one end.
Wt: 2.9g; L: 77.5mm (max.); W: 1.4mm; T: 1.0mm

F.385: Copper alloy strip (Pl. 14.37)
BM: 1991,0702.56; Jackson no.: 284, 288–97, 497–8, 500
Fourteen non-joining fragments of thin copper alloy strip, each rectangular in cross-section, and broken at both ends. Most of the fragments are bent and distorted.
Wt: 5.1g; L: 89.9 mm (max.); W: 1.3mm; T: 0.9mm

F.386: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.162; Jackson no.: 97
Complete gold/silver alloy small ring with overlapping tapered, rounded terminals. Made from a strip with rectangular cross-section.
Wt: 16.7g; D(ext): 25.1mm; W: 13.2mm; T: 2.3mm

F.387: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.166; Jackson no.: 125
Complete gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. One rounded terminal and one broken end.
Wt: 9.5g; D(ext): 24.2mm; W: 5.8mm; T: 1.9mm

F.388: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.171; Jackson no.: 132
Complete gold/silver alloy small ring with overlapping tapered, rounded terminals. Made from a strip with rectangular cross-section.
Wt: 10.9g; D(ext): 25.3mm; W: 5.8mm; T: 1.8mm

F.389: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.172; Jackson no.: 133
Complete gold/silver alloy small spiral ring made from a strip with rectangular cross-section. Tapered, rounded ends.
Wt: 11.2g; D(ext): 23.6mm; W: 10.8mm; T: 2.2mm

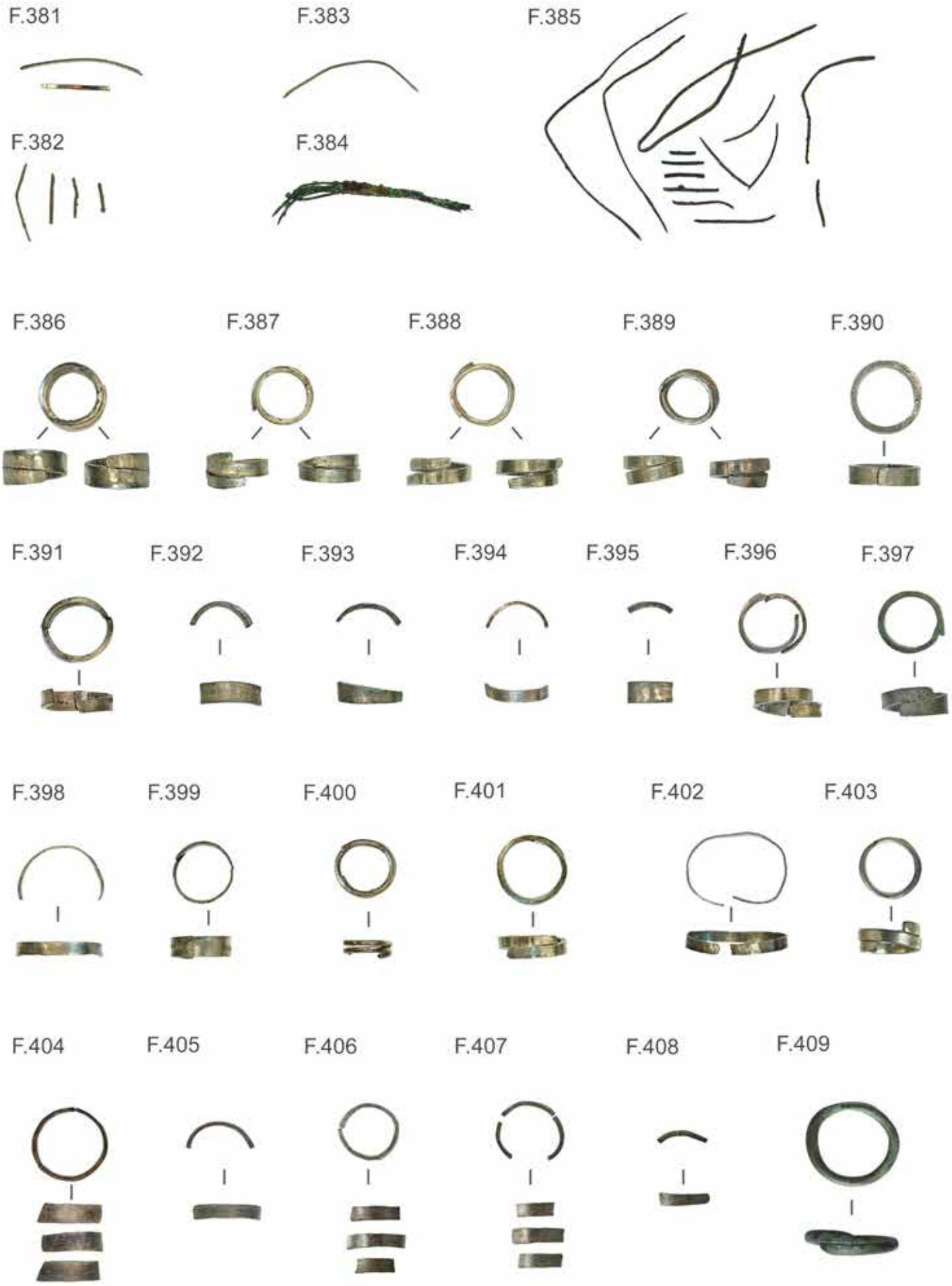
F.390: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.202; Jackson no.: 194
Complete gold/silver alloy small ring with abutting, slightly tapered terminals. Made from a strip with rectangular cross-section.
Wt: 11.8g; L: 27.8mm; W: 7.3mm; T: 2.5mm

F.391: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.203; Jackson no.: 200
Two joining fragments of gold/silver alloy small ring made from a strip with rectangular cross-section, each piece broken at both ends.
Wt: 7.7g; D(ext): 28.0mm; W: 7.8mm; T: 2.0mm

F.392: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0702.28; Jackson no.: 127
Fragment of gold/silver alloy small ring made from a strip with rectangular cross-section, broken at both ends.
Wt: 4.1g; L: 24.0mm; W: 8.0mm; T: 2.1mm

F.393: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0702.36; Jackson no.: 311
Fragment of gold/silver alloy small ring made from a strip with rectangular cross-section. One tapered, rounded terminal, and the other end broken.
Wt: 2.8g; L: 25.2mm; W: 7.7mm; T: 2.0mm

F.394: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0702.38; Jackson no.: 313
Fragment of gold/silver alloy small ring made from a strip with rectangular cross-section. One cut terminal and one broken end.
Wt: 1.9g; L: 24.3mm; W: 4.9mm; T: 1.3mm


F.381
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F.399
F.400
F.401
F.402
F.403
F.404
F.405
F.406
F.407
F.408
F.409
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5
10cm

Plate 14.37

F.395: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0702.39; Jackson no.: 314
Fragment of gold/silver alloy small ring made from a strip with rectangular cross-section. Broken at both ends.
Wt: 2.5g; L: 17.7mm; W: 8.3mm; T: 2.1mm

F.396: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0702.32; Jackson no.: 191, 197
Two joining fragments of a complete gold/silver alloy small ring with overlapping rounded, tapering terminals. Made from a strip with rectangular cross-section.
Wt: 11.0g; D(ext): 26.8mm; W: 8.1mm; T: 2.1mm

F.397: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0702.33; Jackson no.: 193
Gold/silver alloy small ring with overlapping terminals. Made from a strip with rectangular cross-section. One rounded terminal and one cut end.
Wt: 8.2g; D(ext): 26.0mm; W: 9.8mm; T: 2.3mm

F.398: Gold/silver alloy large/small ring (Pl. 14.37)
BM: 1991,0501.205; Jackson no.: 203
Fragment of gold/silver alloy ?large ring, broken at both ends. Made from a strip with rectangular cross-section. Possibly originally a small ring that has been distorted/pulled open.
Wt: 2.6g; D(ext): 33.2mm; W: 4.9mm; T: 0.9mm

F.399: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0702.34; Jackson no.: 198–9
Two joining fragments of gold/silver alloy small ring made from a strip with rectangular cross-section. One roughly rounded and one cut end.
Wt: 5.3g; D(ext): 23.7mm; W: 8.0mm; T: 1.1mm

F.400: Gold/silver alloy small ring/?torc (Pl. 14.37)
BM: 1991,0501.204; Jackson no.: 201
Complete gold/silver alloy small spiral ring with slightly tapered and rounded terminals. Made from a wire with oval cross-section. Possibly originally part of the loop terminal of a multi-strand torc.
Wt: 7.5g; D(ext): 24.0mm; W: 6.4mm; T: 2.5mm

F.401: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.169; Jackson no.: 130
Complete gold/silver alloy small ring with overlapping tapered, roughly rounded terminals. Made from a strip with rectangular cross-section.
Wt: 10.5g; D(ext): 27.0mm; W: 6.0mm; T: 2.2mm

F.402: Gold/silver alloy large/small ring (Pl. 14.37)
BM: 1991,0501.170; Jackson no.: 131
Gold/silver alloy large penannular ring made from a strip with rectangular cross-section. Distorted into an open oval: possibly originally a small ring that has been pulled open. One slightly tapered, rounded terminal, and one cut end.
Wt: 4.0g; D(ext): 39.6mm; W: 4.7mm; T: 0.8mm

F.403: Gold/silver alloy small ring (Pl. 14.37)
BM: 1991,0501.73; Jackson no.: 61
Complete gold/silver alloy small spiral ring made from a strip with rectangular cross-section. Tapered, rounded terminals.
Wt: 12.3g; D(ext): 24.4mm; W: 9.8mm; T: 2.2mm

F.404: Copper alloy small ring (Pl. 14.37)
BM: 1991,0702.26; Jackson no.: 124, 195–6
Three joining fragments of a complete copper alloy small ring made from a strip with rectangular cross-section. Terminals overlap when the fragments are reassembled. Tapering, rounded ends.
Wt: 9.9g; L: 29.9 mm (max.); W: 9.0mm; T: 1.9mm

F.405: Copper alloy small ring (Pl. 14.37)
BM: 1991,0702.27; Jackson no.: 126
Fragment of copper alloy small ring made from a strip with rectangular cross-section. One rounded end, the other cut/broken.
Wt: 2.6g; L: 26.4mm; W: 5.5mm; T: 1.6mm

F.406: Copper alloy small ring (Pl. 14.37)
BM: 1991,0702.37; Jackson no.: 312, 315, 319
Three joining fragments of copper alloy small ring made from a strip with rectangular cross-section. All ends broken.
Wt: 4.2g; L: 23.2 mm (max.); W: 5.5mm; T: 1.5mm

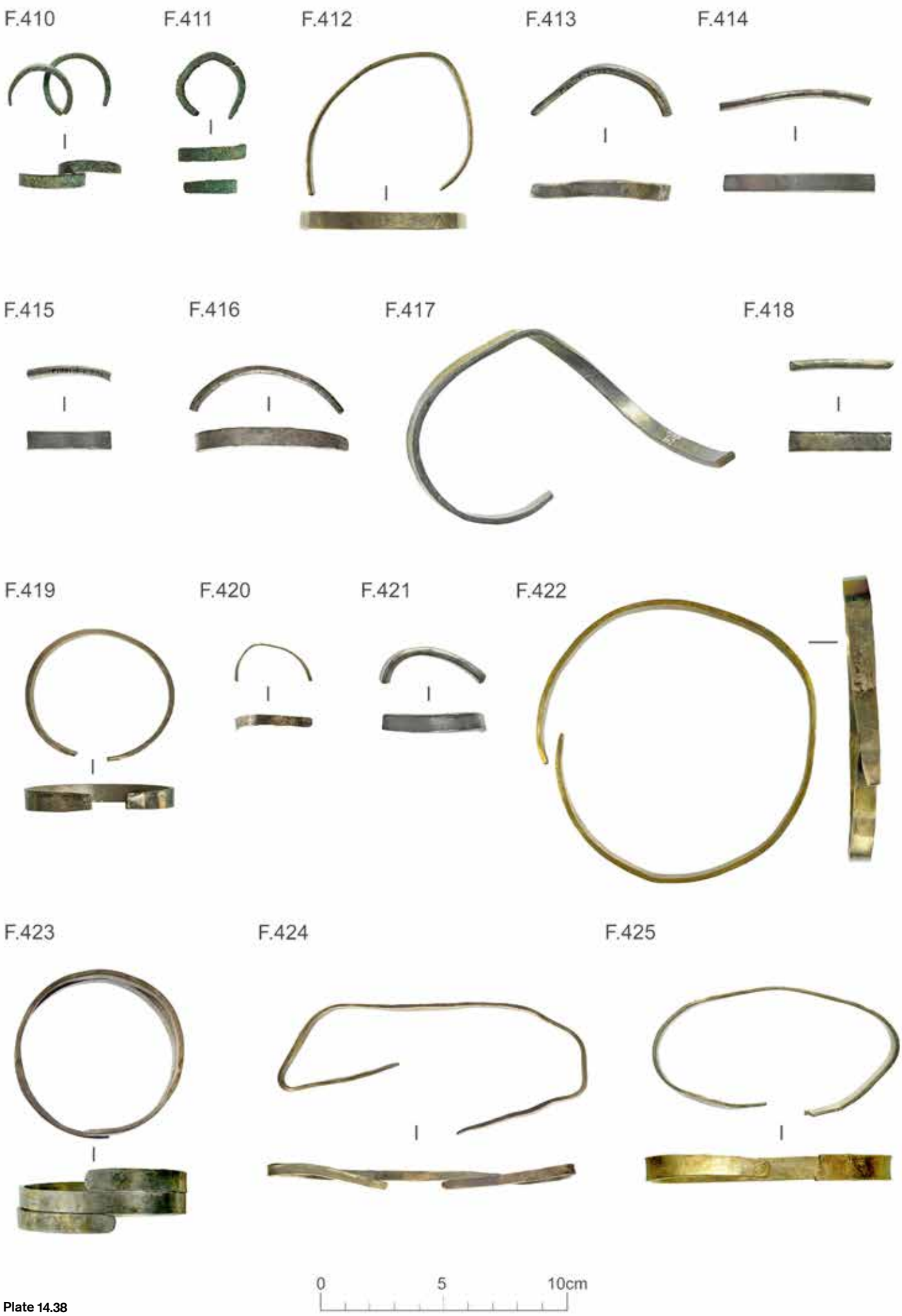
F.407: Copper alloy small ring (Pl. 14.37)
BM: 1991,0702.40; Jackson no.: 316, 318, 320
Three joining fragments of copper alloy small ring made from a strip with rectangular cross-section. All ends broken.
Wt: 3.9g; L: 20.5 mm (max.); W: 6.0mm; T: 1.6mm

F.408: Copper alloy small ring (Pl. 14.37)
BM: 1991,0702.41; Jackson no.: 317
Fragment of copper alloy small ring made from a strip with rectangular cross-section. One tapered, rounded terminal and one broken end (perhaps a recent break).
Wt: 1.4g; L: 19.8mm; W: 4.9mm; T: 2.4mm

F.409: Copper alloy large ring (Pl. 14.37)
BM: 1991,0702.44; Jackson no.: 202
Copper alloy large ring made from circular-section wire. The slightly overlapping terminals are flattened and roughly rounded.
Wt: 12.3g; D(ext): 36.4mm; D(wire): 4.9mm

F.410: Copper alloy small ring (Pl. 14.38)
BM: 1991,0702.35; Jackson no.: 310
Copper alloy small ring made from a strip with rectangular cross-section. Now bent in the centre, but originally with overlapping terminals. Tapered ends, one square-ended and one pointed.
Wt: 10.2g; L: 41.9mm; D(ext): 27.0mm; W: 11.1mm; T: 2.2mm

F.411: Copper alloy small ring (Pl. 14.38)
BM: 1991,0702.277; Site code: SN/AC
Context details: Hoard F pit; Excavated find, surface trowelling.


F.410
F.411
F.412
F.413
F.414
F.415
F.416
F.417
F.418
F.419
F.420
F.421
F.422
F.423
F.424
F.425
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10cm

Plate 14.38

Two joining fragments of a copper alloy small penannular ring made from a strip with rectangular cross-section. One rounded, tapered terminal and one broken end. The break where the fragments join is recent.
Wt: 6.5g; D(ext): 27.9mm; W: 5.4mm; T: 3.5mm

F.412: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0501.150; Jackson no.: 83
Gold/silver alloy large penannular ring made from a strip with rectangular cross-section. Bent and distorted. One tapered end with rounded terminal and the other, broader, end broken (perhaps a recent break).
Wt: 24.8g; L: 78.7mm; W: 7.7mm; T: 2.0mm

F.413: Gold/silver alloy ?large ring (Pl. 14.38)
BM: 1991,0501.199; Jackson no.: 187
Fragment of gold/silver alloy ?large ring made from a strip with rectangular cross-section. Original diameter uncertain as the object is distorted, pulled slightly straight. One tapered, slightly rounded terminal, broken at the other end.
Wt: 15.3g; L: 57.8mm; W: 7.0mm; T: 3.7mm

F.414: Gold/silver alloy ?large ring (Pl. 14.38)
BM: 1991,0501.200; Jackson no.: 188
Fragment of gold/silver alloy ?large ring made from a strip with rectangular cross-section. Original diameter uncertain as the object is distorted, pulled slightly straight. Broken at both ends.
Wt: 15.2g; L: 61.8mm; W: 7.7mm; T: 3.4mm

F.415: Gold/silver alloy ?large ring (Pl. 14.38)
BM: 1991,0501.201; Jackson no.: 190
Fragment of gold/silver alloy ?large ring made from a strip with rectangular cross-section. Original diameter uncertain as the object is distorted, pulled slightly straight. Broken at both ends.
Wt: 8.0g; L: 34.1mm; W: 7.6mm; T: 3.3mm

F.416: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0702.24; Jackson no.: 122
Fragment of gold/silver alloy large ring made from a strip with rectangular cross-section. One tapered, rounded end, the other cut/broken.
Wt: 14.5g; L: 62.6mm; W: 8.0mm; T: 3.2mm

F.417: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0702.25.a–c; Jackson no.: 123, 185–6
Three re-joined fragments of gold/silver alloy large ring made from a strip with rectangular cross-section. Bent and distorted out of shape. One tapered and roughly finished terminal, one end cut/broken.
Wt: 58.6g; L: 133.7mm; W: 8.0mm; T: 3.5mm

F.418: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0702.31; Jackson no.: 189
Fragment of gold/silver alloy large ring made from a strip with rectangular cross-section. Broken at both ends.
Wt: 10.9g; L: 42.9mm; W: 8.3mm; T: 3.5mm

F.419: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0501.219; Jackson no.: 304–6
Complete gold/silver alloy large penannular ring reconstructed from three fragments broken by finder. Made from a strip with rectangular cross-section. Tapered, roughly finished terminals.
Wt: 24.3g; D(ext): 60.9mm; W: 8.5mm; T: 2.0mm

F.420: Gold/silver alloy ?large ring (Pl. 14.38)
BM: 1991,0501.220; Jackson no.: 309
Fragment of gold/silver alloy ?large ring made from a strip with rectangular cross-section. Original diameter uncertain as the object is distorted, pulled slightly open. One rounded terminal, the other end broken, perhaps a recent break.
Wt: 1.7g; L: 31.7mm; W: 4.6mm; T: 1.3mm

F.421: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0407.65.a; Site code: SN/AG
Context details: Hoard F pit; Excavated find, within hoard pit, down to bottom.
Fragment of gold/silver alloy large ring made from a strip with rectangular cross-section, broken at both ends.
Wt: 11.8g; L: 43.1mm; W: 7.7mm; T: 3.5mm

F.422: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0501.61; Jackson no.: 57
Complete gold/silver alloy large ring with overlapping terminals. Made from a strip with rectangular cross-section. Tapered ends, one rounded, the other cut.
Wt: 92.0g; D(ext): 116.0mm; W: 10.3mm; T: 2.4mm

F.423: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0501.117; Jackson no.: 192
Complete gold/silver alloy large spiral ring made from a strip with rectangular cross-section. Very slightly tapered, roughly rounded terminals.
Wt: 64.1g; D(ext): 69.0mm; W: 23.6mm; T: 2.1mm

F.424: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0501.60; Jackson no.: 56
Complete gold/silver alloy large penannular ring made from a strip with rectangular cross-section, badly distorted. Tapered, rounded terminals.
Wt: 26.0g; L: 125.4mm; W: 4.4mm; T: 1.8mm

F.425: Gold/silver alloy large ring (Pl. 14.38)
BM: 1991,0501.99; Jackson no.: 111
Gold/silver alloy large penannular ring made from a strip with rectangular cross-section. Badly distorted, now oval in plan. One tapered, rounded terminal and one cut end.
Wt: 46.0g; L: 100.4mm; W: 10.1mm; T: 1.8mm

F.426: Gold/silver alloy large ring (Pl. 14.39)
BM: 1991,0501.115; Jackson no.: 121
Complete gold/silver alloy large penannular ring made from a strip with rectangular cross-section. Bent into an elongated oval, with inturned, tapered ends.
Wt: 51.1g; L: 119.6mm; W: 8.2mm; T: 2.8mm

F426

F.427

F.428

F.429

F.430

F.431

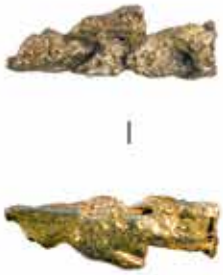
F.432

F.433

F.434

F.435

F.436



F.437

F.438

F.439

F.440

F.441

F.442

F.443

F.444

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Plate 14.39

F.427: Gold/silver alloy large ring (Pl. 14.39)
BM: 1991,0501.116; Jackson no.: 184
Complete gold/silver alloy large penannular ring made from a strip with rectangular cross-section. Bent into an elongated oval, with inturned, tapered ends.
Wt: 70.3g; L: 166.0mm; W: 7.4mm; T: 2.3mm

F.428: Copper alloy large ring (Pl. 14.39)
BM: 1991,0702.21; Jackson no.: 60
Complete copper alloy large penannular ring made from a strip with rectangular cross-section. Tapering, cut terminals which do not quite touch.
Wt: 52.5g; D(ext): 55.6mm; W: 17.0mm; T: 3.5mm

F.429: Gold/silver alloy wire (Pl. 14.39)
BM: 1991,0501.156; Jackson no.: 90
[Analysed: see Ch. 17]
Fragment of twisted gold/silver wire, cut/broken at both ends (**Fig. 20.9a–c**).
Wt: 7.4g; D(wire): 2.9mm; L: 80.4mm

F.430: Copper alloy wire (Pl. 14.39)
BM: 1991,0702.45; Jackson no.: 206
Fragment of copper alloy wire with rough surface. Cross-section varies from circular to diamond-shaped. Bent and distorted, both ends broken.
Wt: 6.9g; D(wire): 5.2mm; L: 60.2mm

F.431: Copper alloy wire (Pl. 14.39)
BM: 1991,0702.99; Jackson no.: 180
Fragment of circular-section copper alloy wire, heavily corroded, broken at both ends.
Wt: 0.5g; L: 11.1mm; W: 4.2mm

F.432: Copper alloy wire (Pl. 14.39)
BM: 1991,0407.45.h; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Fragment of copper alloy wire, square in cross-section and very slightly twisted, broken at both ends.
Wt: 0.2g; D(wire): 3.0mm; L: 6.9mm

F.433: Copper alloy wire (Pl. 14.39)
BM: 1991,0702.271; Jackson no.: 499
Fragment of circular-section copper alloy wire, broken at both ends. Bent at close to a right angle in two places.
Wt: 0.3g; D(wire): 1.5mm; L: 18.9mm

F.434: Copper alloy wire (Pl. 14.39)
BM: 1991,0702.225; Jackson no.: 449
Fragment of circular-section copper alloy wire, broken at both ends and bent into an irregular open loop.
Wt: 2.4g; D(wire): 2.0mm; L: 34.4mm

F.435: Copper alloy large ring/?ingot/?bracelet (Pl. 14.39)
BM: 1991,0702.5; Jackson no.: 118
Fragment comprising around half of acopper alloy large ring, perhaps an ingot or bracelet. Semi-circular in plan, with D-shaped cross-section. Broken or cut at one end, while the other has a finished, expanded, slightly rounded terminal.
Wt: 97.6g; L: 102.8mm; W: 12.0mm; T: 8.3mm

F.436–7: Gold/silver alloy lump (Pl. 14.39)
F.436–7 join.

F.436:
BM: 1991,0501.74; Jackson no.: 62
Irregular, flattish gold/silver alloy lump, one end broken. Fragments of slender, gold/silver alloy circular-section wire, semi-coalesced, project in several places.
Wt: 39.5g; L: 56.4mm; W: 20.4mm; T: 10.1mm

F.437:
BM: 1991,0501.75; Jackson no.: 63
Irregular, flattish gold/silver alloy lump, one end broken. At least two fragments of thin gold/silver-alloy twisted wire project from the main body of the lump.
Wt: 114.2g; L: 91.0mm; W: 37.5mm; T: 12.4mm

F.438: Gold/silver alloy linear ingot (Pl. 14.39)
BM: 1991,0501.114; Jackson no.: 120
Complete gold/silver alloy D-section linear ingot, with tapered, rounded ends.
Wt: 24.4g; L: 55.4mm; W: 9.7mm; T: 7.2mm

F.439: Gold/silver alloy linear ingot (Pl. 14.39)
BM: 1991,0501.198; Jackson no.: 183
Complete gold/silver alloy D-section linear ingot, slightly tapered, with rounded ends.
Wt: 22.0g; L: 66.5mm; W: 9.4mm; T: 6.3mm

F.440: Copper alloy linear ingot (Pl. 14.39)
BM: 1991,0702.6; Jackson no.: 119
Complete copper alloy D-section linear ingot, with tapered, rounded ends.
Wt: 63.8g; L: 96.1mm; W: 11.6mm; T: 10.8mm

F.441: Copper alloy sheet (Pl. 14.39)
BM: 1991,0407.45.k; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Two small fragments of copper alloy sheet, fused together.
Wt: 0.1g; L: 7.0mm; T: 0.2mm

F.442: Copper alloy lump (Pl. 14.39)
BM: 1991,0407.45.l; Site code: SN/AE; SN/AF
Context details: Hoard F pit; Excavated find, surface trowelling/within hoard pit, down to 25cm.
Thirteen small, amorphous copper alloy lumps.
Wt: 0.9g; L: 10.0 mm (max.)

F.443: Copper alloy sheet/lump (Pl. 14.39)
BM: 1991,0407.65.e; Site code: SN/AG
Context details: Hoard F pit; Excavated find, within hoard pit, down to bottom.
Small fragments of copper alloy lumps or sheet.
Wt: 0.3g

F.444: Gold/silver alloy torc (Pl. 14.39)
MSCC: (2P)R
BM: 1991,0407.43; Site code: SN/AH
Context details: Near Hoard F. Most likely an outlier from the hoard, disturbed by ploughing.
Fragment of gold/silver alloy multi-strand torc, comprising a single-loop terminal (continuous with the neck-ring wires) and a length of neck-ring, cut and slightly melted at the other end. Stage II construction of two circular-section wires plied together. The loop terminal shows heavy cracking, and appears to have been partially untwisted.
Wt: 27.0g; D(nr): 7.0mm; D(wire): 3.6mm; D(term): 15.9mm; L: 76.8mm

The Hoard F helmet

Fleur Shearman and Julia Farley

F.445: Copper alloy helmet
BM: 1991,0702.272; Site Codes: SN/AC; SN/AJ; SN/AE; Jackson no.: 501a
Hoard F was deposited in what was originally thought to be a vessel or container made from copper alloy sheet. This was later re-identified as an unusual form of copper alloy helmet. It has subsequently been reconstructed from fragments including metal-detected finds and excavated finds (from both surface trowelling and within and around the edge of the Hoard F pit).

Discovery and identification

Hoard F was discovered during metal-detecting by Charles Hodder (see Chs 2, 4 and 12). In describing the specifics of retrieval, Hodder noted the presence of a copper alloy 'container or vessel' holding the hoard, though with no traces of a base. His account stated that the object was in a very fragmentary state, with no large pieces of copper alloy sheet surviving; he accompanied this with a sketch showing the precious metalwork held within a bowl-shaped object in a flat-bottomed pit (see Ch. 12; **Fig. 12.1**). Photographs taken by Hodder on site include several of the larger fragments of sheet, later integrated into the front of the helmet (see **Fig. 16.2**).

The findspot of Hoard F was subsequently investigated archaeologically, leading to the recovery of numerous further small copper alloy fragments from the vicinity of the metal-detected pit. At this stage the corroded and fragmentary sheet container was still categorised as a vessel; an understandable preliminary identification as the object was shattered into hundreds of small fragments and needed reassembly before it could be fully interpreted. The likelihood of a helmet in secondary usage as a container was unexpected in this context and the flat-bottom of the pit, and therefore by inference potentially the container, no doubt added to the assumption that it was a vessel.

Ralph Jackson and Ian Stead first recorded Hoard F when it entered the Museum (Chs 2, 12) (Stead and Jackson unpublished). Amongst the sheet fragments, they noted the presence of both hinges and perforated areas, features shared in common with Iron Age strainer bowls, such as the vessel from the Welwyn Garden City burial (Stead 1967) and in the later find from Chettle Park (BM 2009,8006.2) (see also Sealey 1999). A fragment later found to be the curved eyebrow arch of the helmet was initially interpreted as a distorted piece of the edge of the vessel.

The copper alloy sheet pieces were not further examined until 2007, when the copper alloy proportion of the metalwork was under review in advance of publication. Close examination of the fragments based on a visual assessment was progressed. Visual criteria used in categorisation were morphology and colour of corrosion, thickness of sheet and its curvature. Apart from a few broken torc strands the pieces of sheet were similar to each other; it was clear they were parts of the same object so work towards its reconstruction could begin. After the preliminary join-making, X-radiography of the object was carried out in the conservation laboratory (see below). This initial X-radiography suggested that the fragments may not in fact have originated from a vessel, but rather from a helmet. After discussion with the Iron Age curator (then Jody Joy) and Dr Stead, this identification was confirmed and the pieces formerly labelled as fragments of a vessel were reassigned as *militaria*.

The fragments which were subsequently reconstructed to form the helmet came from a variety of groups: the detected copper alloy sheet (Ralph Jackson no. 501), small fragments recovered during excavation of the Hoard F pit (site code SN/AC), and others retrieved from residues associated with copper alloy torcs from Hoard F (site codes SN/AE, SN/AJ). Some of the latter were identified during a review of all copper alloy sheet fragments from the site carried out in 2018. This survey included the reserve collections held in both NCM and the BM. Most could easily be discounted as stray finds of later medieval or post-medieval date, but three small diagnostic pieces of helmet were found from the context of the Hoard F pit. X-ray fluorescence analysis of a small sample of helmet fragments was also carried out in 2018 by Duncan Hook, using a Bruker ARTAX XRF spectrometer with a helium atmosphere, 50 kV X-ray tube voltage, 0.8 mA current, 0.6mm diameter collimator and 200s counting time.

At the time of writing, the surviving fragments of the Snettisham helmet have been reconstructed as far as possible with reversible adhesives and minimum use of gap fills to achieve a self-supporting structure. All joins were checked with the aid of a binocular microscope at magnifications of between x10 and x90. The methodology and ethical approaches for archaeological arms and armour are similar to approaches for archaeological conservation but benefit from specialised knowledge of this material by arms and armour conservators/restorers and close collaboration with colleagues in both British and European collections. For methodology of archaeological *militaria* conservation and reconstruction see Hockey and Shearman (2006) and Hockey *et al.* (2013).

Imaging the helmet

X-radiography proved to be a useful diagnostic tool in identifying the copper alloy fragments originating from the helmet. It was also used to record the fragments, as the technique is capable of producing images clarifying detail and construction elements not visible to the eye. Resultant

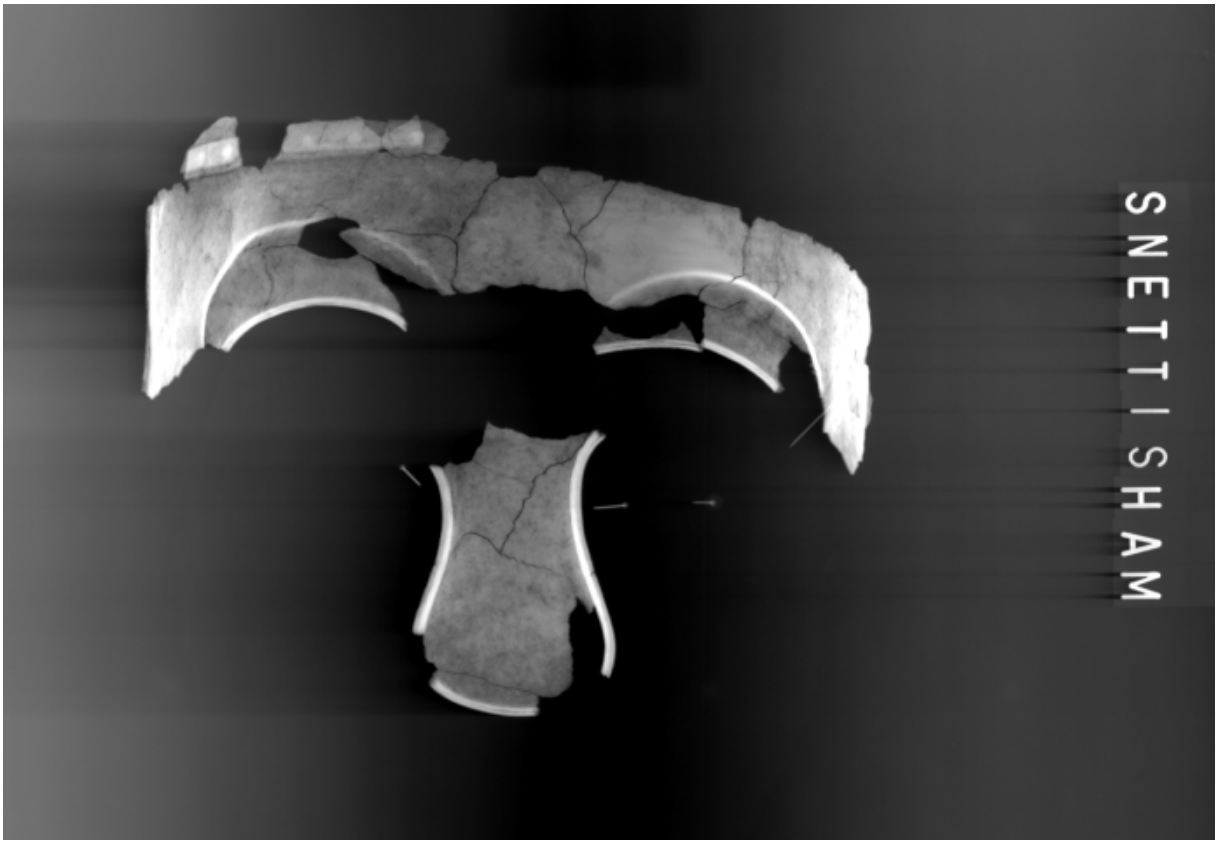


Figure 14.23 X-radiograph of the front of helmet after reconstruction

Figure 14.24 X-radiograph of layout of joining fragments from the back and sides of the helmet

images can be interrogated for technical information which can also support joining and reconstruction (see Shearman and Dove 1997; Hockey *et al.* 2018).

The first helmet X-radiographs were taken with a Torrex X-radiography cabinet with film processing in the BM conservation laboratories. In 2014, a new digital capacity enabled a set of X-radiographs of the helmet to be produced in new facilities in the BM's World Conservation and Exhibitions Centre (WCEC) Weston Archaeology Suite (**Figs 14.23–4, 21.41a–b**). The move to digital capture meant images for conservation purposes were produced using a Euroteck cabinet with fixed source (Gulmay CP 225 kV X-radiography Generator and MP1 type2 Controller) in combination with a Carestream Industrex HPX-1 scanner and software. After digital capture, images created in Digital Images and Communications in Medicine (DCM) files were saved in .tiff and .jpeg format after enhancement or manipulation. A high resolution screen was used to evaluate the digital X-radiographs. Resultant images could be further manipulated and enhanced in Adobe Photoshop. The digital images had the advantage of being able to be manipulated, enlarged and shared electronically.

Investigation of the Snettisham hoards kept pace with current developments in imaging and CT scanning. In 2019, the helmet was photographed and scanned by Craig Williams, illustrator for the Department of Britain, Europe and Prehistory, at the BM, and a 3D model was created using photogrammetry software Agisoft Metashape (**Fig. 14.25**).

Study of the helmet is ongoing. Next steps will include 3D computer modelling in collaboration with archaeological illustrators and curators. The helmet would also benefit from non-contact laser scanning of internal surfaces for the production of a shaped support mount to enable non-contact study and even display. This would minimise the handling risk to the thin and corroded copper alloy of the helmet, making it easier for future researchers to continue exploring this fascinating object.

Description and condition

For the most part, only the lower part of the Snettisham Hoard F helmet can be reconstructed. Rather than being of a simple one-piece bowl construction, the crown seems to have been made separately, being riveted onto the lower section along a horizontal seam running around the helmet at brow level. Little of the crown survives, and no fragments of a knop or similar crown fitting were recovered, but the line of rivet fixings above the brow line can be clearly seen on the X-radiograph (**Fig. 14.23**).

At the front are two symmetrical eyebrow arches, which would once have continued down into a central nasal. The edges of these were finished with copper alloy binding strips. A detached nasal fragment remains, but does not join the brow section (**Figs 14.23**, **14.25**). The fragments reconstructed as a spoon-shaped nasal are reminiscent but distinctive from the form of the Corinthian-style helmet (cf. Bottini 1988, see discussion below). At the sides of the face, the helmet continues above eye level, with a horizontal copper-alloy-clad iron hinge on either side (**Figs 14.24–5**, **14.28**) which appear to have originally held a strap. Behind the hinges, the body of the helmet descends sharply down towards the jaw line, and the vertical edges are finished with binding strips. The back of the helmet can be partially reconstructed: mostly it consists of plain copper alloy sheet, through holes have been intentionally pierced immediately behind the hinges, perhaps in the area of the ears. A rivet protrudes inwards from the centre back, presumably fixing an inner organic liner in place (see below).

Overall, around one third of the helmet is missing, including most of the crown and large areas of the lower edge of the back of the helmet. Recent breaks on corroded copper alloy are distinctive with sharp, clean (rather than corroded) cross-sections with distinctive break edges, while centuries-old breaks are often corroded over or still covered with compacted soil and greenish corrosion products of copper carbonates such as malachite (Scott 2002). Certain thick-walled diagnostic fragments (just under 2mm at their thickest points), located between nasal and brow and along the upper and lower edges of the helmet, showed evidence of recent 'fresh' breaks. It is probable that the broken-off sections of these diagnostic pieces were present but not recovered. In addition to missed fragments which were scattered in the spoil or not retrieved from the pit area, there was a degree of corrosion present on many broken cross-sections, suggesting that some parts of the helmet were likely broken or possibly missing in antiquity.

Features of the helmet

The methodical conservation work carried out on the helmet revealed a number of detailed aspects of its form and construction, including manufacturing evidence (in the form of hammer marks on the interior surface), edge bindings, hinges, perforated ear areas, decorative features and patches, crown construction, and additional rivet fastenings. These are explored in detail below.

Manufacturing evidence

Directional manufacture hammer strikes from beating out the copper alloy sheet which forms the helmet are visible to the eye. They appear particularly on the inner surfaces of the helmet where the metal surface is compacted by repeated strikes. Metallic areas are preserved on these inside surfaces towards the back of the helmet, which due to compaction has survived better than the corroded and blistered outer surfaces (**Fig. 14.27**).

Edge binding

The spoon-shaped nasal at the front of the helmet, the brow arches, and the lower helmet edging where it survives as fragments, are finished with a narrow U-shaped copper alloy edge strip, 3.5mm in width. This would appear to have been crimped in place to reinforce the edge of the helmet. Hammer marks also survive adjacent to the edge binding, indicating it was mechanically attached. Several additional short sections of straight edge binding survive. The lack of curvature suggests that these could have come from the edging of the damaged areas at the back of the helmet (along the neck-guard) or possibly the straight vertical-edged cheek.

Figure 14.25 Digital reconstruction of the helmet by Craig Williams, made up of composite 3D scans using Agisoft Metashape photogrammetry software (above); photograph by Fleur Shearman of the main surviving areas of the helmet laid out (below)

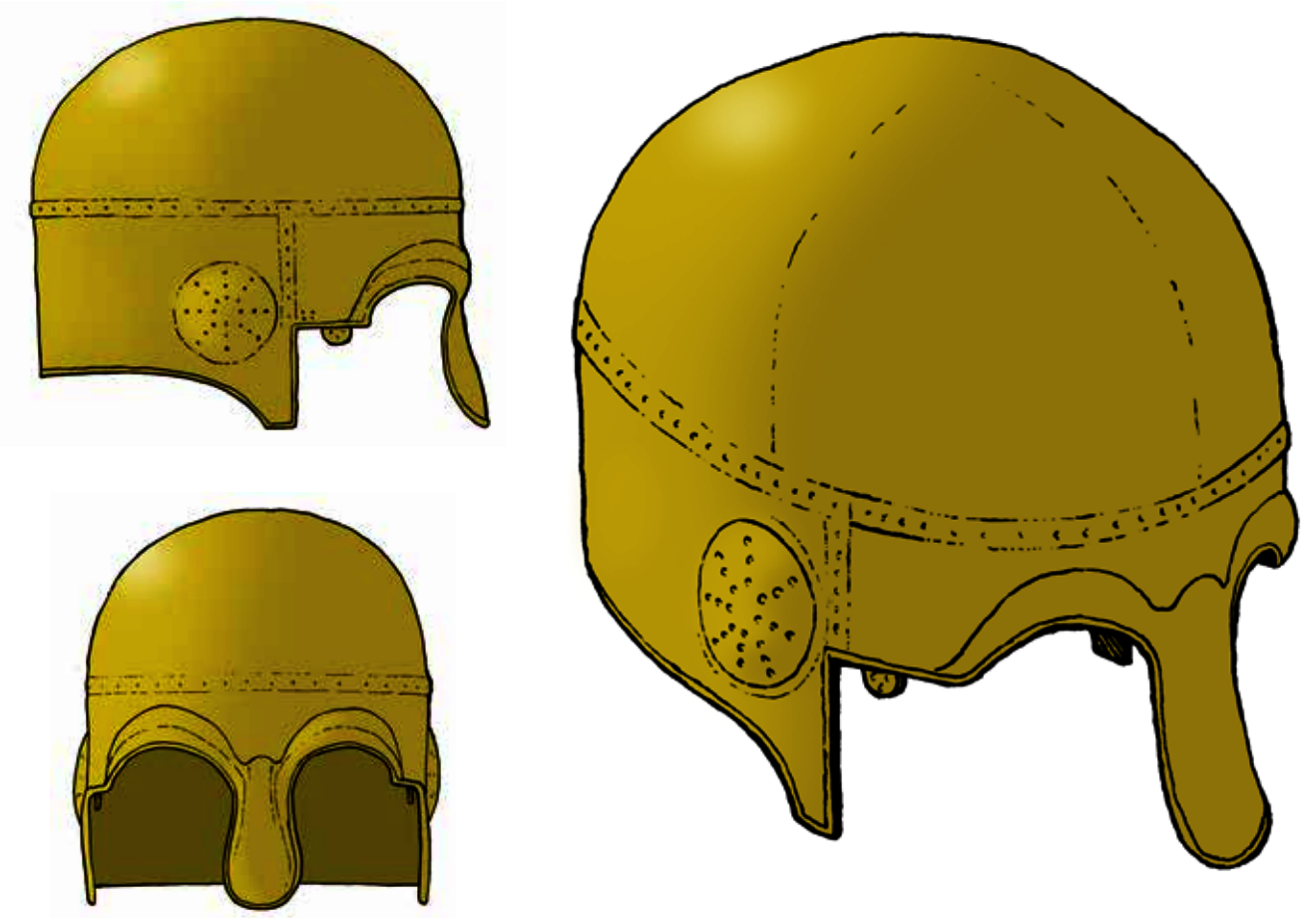


Figure 14.26 Digital reconstruction of the helmet by Craig Williams as detailed in Figure 14.25 (above). Simplified hypothetical reconstruction of the complete helmet, drawn by Craig Williams (below). It is not possible to accurately site the decorated fragments shown in Figures 14.29–30 and so they are not included here

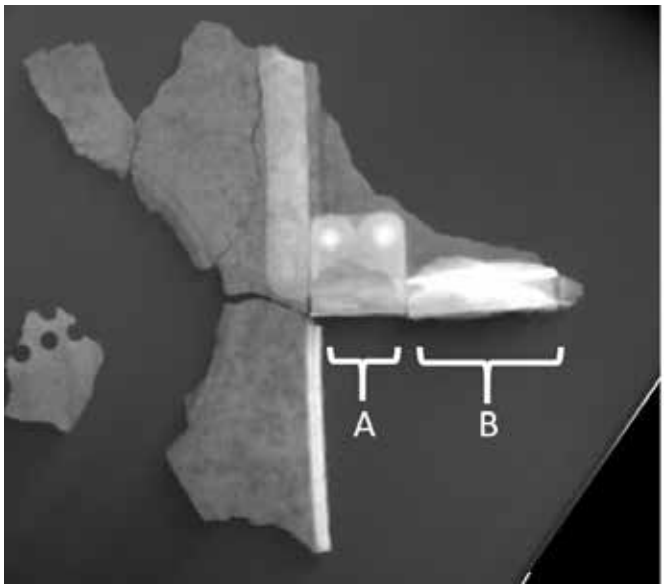
Hinges

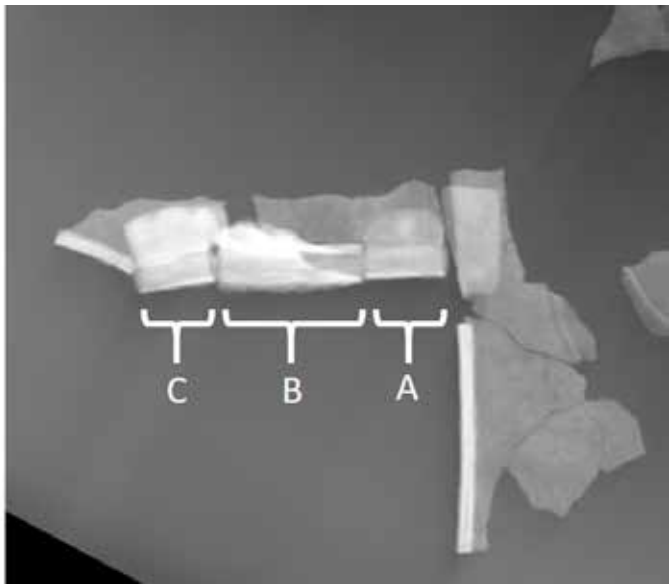
At the outer edges of the brow arches on each side of the helmet, a short, horizontal fitting bridges the gap between the brows and a vertical right angle where the helmet descends down towards the jaw. The placement of this vertical edge directly behind the brows suggests a closed-cap design, protecting ears, brow and temples.

The short horizontal element on either side of the brows is an articulated copper-alloy-clad iron hinge, with the copper alloy fixings in three parts (here labelled A, B and C, see **Fig. 14.28**), though on one side the component closest to the brow (C) is not present. Although traces of mineral-preserved leather do not survive, given the closed-cap design of the helmet, the function of the short hinges may simply be for a mobile chin strap. The central element (B) is a double layer of copper alloy sheet, in the shape of a half-moon or semi-circle (22mm in width, with a double thickness of 4mm), pierced by a single rivet. The gap between the two semi-circular sheets, allowing for an increase in volume through corrosion, represents the notional thickness of a missing material of approximately 2mm in thickness; most probably a pliable and strong leather. These semi-circular elements are currently positioned at right angles and facing inward on both sides of the helmet but are likely to be immobilised through corrosion rather than being in their original orientation.

Figure 14.27 Manufacture hammer marks on inner surface of helmet

On either side of B are scallop-edged copper alloy sheet fittings (A and C), each riveted to the helmet body by either one or two flat-headed rivets. These scalloped fittings bridge the gaps between the central hinge and the brow on one side (C), and closed cap on the other (A), holding the iron hinge





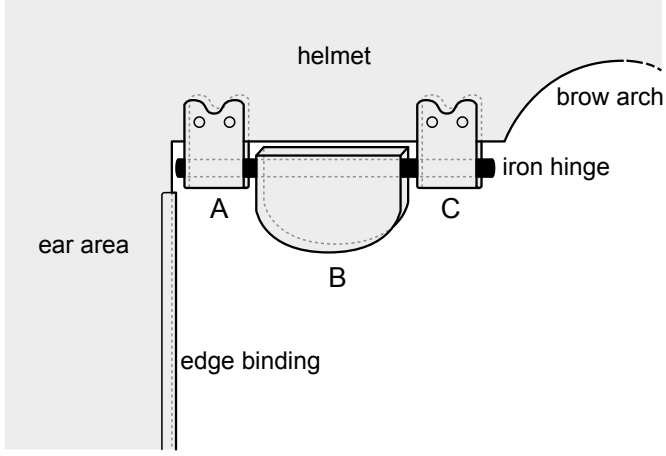


Figure 14.28 X-radiographs showing the hinge fittings in the cheek areas of the helmet (above, left and right); schematic drawing by Craig Williams showing a possible reconstruction of the hinge fitting (left). The central component (B) may have held a leather element such as a chin strap

Figure 14.29 Front, back and side views of decorated patch from the helmet, showing the sandwiching of the helmet body fragment between a plain inner and decorated outer patch

in place. The riveting to the scalloped fittings is visible only in the X-radiography of this area (**Figs 14.24**, **14.28**). It is similar in appearance and size to the line of flat-headed rivets at brow level which secure the separate crown element.

Perforated ear areas

On opposing sides of the helmet, directly behind the vertical cheek edging, there are partially surviving areas of shallow circular repoussé, 50mm in diameter, with associated flat fragments, one of which joins to the feature and all of which are perforated with simple linear designs. A perforated area around the ears would enable the wearer to hear more clearly, while still offering more protection than the open ear form of helmet. The design of the perforations only partially survives but was clearly intended to be decorative, with simple patterns such as radiating lines which may have formed a star shape. Simple star-shaped perforated designs are also found on copper alloy sheet-metal vessels from the Iron Age, such as strainer bowls (see Stead 1967; Sealey 1999).

Decorative features and patches

Two copper alloy sheet fragments found in association with the helmet were decorated with curvilinear designs (see Ch. 21; **Figs 14.29–30**, **21.41**). X-radiography was particularly helpful in understanding these fragments.

The first (**Figs 14.29, 21.41a–b**) is a patch in the form of a lobed, S-shaped motif (see Ch. 21). This cannot be placed on the helmet reconstruction, but from the distinctive appearance of the corrosion it was clearly from the body of the helmet. Identically-shaped patches had been applied on either side of the sheet-metal body of the helmet, creating a triple-layer 'sandwich'. Examination of the digital X-radiograph shows that the appliqués had been placed over a pre-existent split in the thin metal of the helmet, and are therefore likely to be contemporaneous with manufacture. This kind of decorative repair as part of the manufacturing process is well attested in the Iron Age; for example, similar decorative patches were applied to defects in the copper alloy sheet sections of the Iron Age cauldrons from Chiseldon (Baldwin and Joy 2017, 37–64). The combined layers are 3mm in thickness, while the dimensions of the appliqués are 19 by 32mm. The the top layer of sheet (on the exterior of the helmet) was decorated with curvilinear designs delimited in so-called basket-weave hatching, while the opposing appliqué (on the inside of the helmet) was plain but copied its S-form. The patches were originally riveted neatly together through the helmet body at seven points, five of which still hold rivets. Not all of the fastening rivets on the corroded appliqué are visible to the naked eye, but they can be seen on the X-radiograph (see **Fig. 21.41a–b**).

The second piece of decorated copper alloy sheet (**Figs 14.30**, **21.41a–b**) is rectangular in plan with a shallow curve (63mm in length and 33.2mm in width). It is decorated with a repoussé reverse-S pattern with keeled roundel (see Ch. 21 for full discussion of decoration). One long edge is original; an incised line runs parallel to the surviving finished straight

Figure 14.30 Front and back views of decorative sheet element, most likely from the helmet

edge. This edge is perforated in two areas along its length; one hole is undamaged and what is likely to be the siting for a second hole is torn across. No rivet fastenings survive in association with this fragment. The metal in this decorated fragment is of comparable width to the thinner areas of the helmet, typically just over 0.5mm, and its appearance is close but not identical. It is currently unplaced but may be a patch for the helmet or not directly associated with the object.

Crown construction

The body of the helmet curves gently towards a shallow, domed crown of thinner metal. The crown itself was made separately from the body, and riveted on. Running horizontally around the circumference of the helmet above the brow is an encircling overlap of sheet metal where these two components joined, secured with a line of small copper alloy disc-headed rivets. The helmet is fragmented around this circuit but most of the rivet overlap survives well. The crown, which would have been at the bottom of the hoard, was the most highly corroded area and survives only as multiple small fragments, some only a few millimetres in diameter. For this reason, its original appearance is currently unresolved. One fragment appears to show a shallow curvature at its broken edge which may be evidence for a missing addition such as a knop or other fitting; its placing within any restoration of the crown will be critical for its understanding.

Rivet fastenings and the helmet lining

Two separate rivets (not associated with double sheet fixings such as those seen around the crown) were recovered with the helmet. The first has a square head 8mm in width and has not as yet been located within the reconstruction. A fragment of corroded copper alloy sheet (1.8mm across) preserved at the top of the shank may be the remains of a retaining washer or associated with the helmet wall. Fibrous material preserved on the shank of this rivet suggests leather 2.5mm in thickness. If not from the helmet lining (see below), it is possibly part of a lost chin fastening.

The second rivet (**Fig. 14.31**) has a separate shank sleeve and circular disc head 8mm in diameter and can be securely placed by joins to the inner centre-back of the helmet. As it now protrudes from the surface into the interior of the helmet it would have certainly originally secured a liner with a thickness equivalent to the height of the shank of 2mm. Fibrous mineral-preserved organic remains were also present in the internal recessed surfaces of the circular repoussé areas around the ears, suggesting that a cap was present which extended to the temples and protected the ears. It is unlikely its inclusion to the light framework of the Snettisham helmet would afford significant additional protection to the head: the function suggested here is as a soft, padded liner. The fibrous mineralised material preserved in both areas by the agency of the copper alloy is characteristically turquoise in colour and under magnification resembles skin product or leather. Mineral-preserved fibres on the rivet shank were examined under magnification using a Kyowa binocular microscope. Structures closely resembling the fibre bundle structure from the corium of leather or skin product were noted. (Identification and interpretation were carried out in accordance with criteria set out by the Archaeological Leather Group (ALG) and using Leather Conservation Centre (LCC) samples and standards). The liner may have been exclusively of leather or skin product. If it was padded, woven textile does not seem to have been used, since no woven structures were noted. However, padded liners utilising a non-woven felted material remain a possibility. Scanning electron microscopy of the rivet and its degraded mineralised remains may resolve the suggested identification.

Parallels and date range

The Snettisham helmet has no exact parallels, and so cannot be closely dated stylistically. The latest datable objects from Hoard F are Gallo-Belgic coins minted 100–60 BC (Ch. 15), although some of the torcs may have been much older (Chs 8, 20 and 23). Stylistically, the decoration on the helmet is not dissimilar to other objects from Snettisham, but again this style is not closely datable (Ch. 21); objects with similar decoration are known from contexts spanning from the 3rd century BC to the 1st century AD.

Very few helmets are known from Iron Age Britain, and almost all are unusual in some way. If headdresses composed of bronze bands (such as the example from Mill Hill, Deal, Kent, see Stead 1995b) and other (probably ceremonial)

Figure 14.31 Side and front views of fragment from centre back of the helmet, pierced by a rivet

helmet-like headdresses identified by Stead (*ibid.*, 83–4; e.g. the find from Cerrig-y-Drudion, Conwy) are excluded, only three Late Iron Age helmets potentially contemporary with the Snettisham find are known from Britain. One is the unique horned helmet dredged from the Thames near Waterloo in central London (Jope 2000, 255; BM 1988,1004.1), which exhibits similar repoussé decorative elements to that seen on the decorated fragment from Snettisham (**Fig. 14.30**), stylistically dated to the 2nd or 1st centuries BC. There are also two 1st-century BC type helmets from Britain: one from a cremation burial at Bridge, near Canterbury, Kent (Farley *et al.* 2014) and one from an inhumation burial in North Bersted, Sussex (Taylor *et al.* 2014). The latter was ornamented with a spectacular openwork crest, decorated with La Tène-style motifs.

In this context, it is perhaps not surprising that the Snettisham helmet also seems to be unique. Unlike the helmets from Bridge and North Bersted, it does not fit into the standard array of continental forms, which are generally of simple bowl form with or without a neck-guard and knop, plume or ring as a central feature rising from the crown (Bottini 1988, 316; Brailsford 1975a; Feugère 1994; Pernet 2010). The nasal and brow ridges bear a superficial similarity to Chalcidian helmets (Bottini 1988, 137–50) and Corinthian-style helmets (Bottini 1988, 65–106). The former were in use in the Mediterranean world, particularly Greece and southern Italy, from the 5th to 4th centuries BC, and the latter from the 8th to 5th/4th centuries BC, although use and knowledge of the style may have persisted later, as attested by the appearance of a figure (perhaps Mars) wearing a similar helmet on the late 2nd-century BC 'Domitius Ahenobarbus relief' from Rome, now in the Louvre (see Bonanno 1976, 7–11). Nonetheless, the Snettisham helmet is distinct in form from both of these archaic and classical helmet types. It has a broader nasal than the Chalcidian helmet, and lacks the hinged cheekpieces and open ear areas of this style. Although having a closed-cap design which protects the ears and neck, it similarly lacks the closed, forward-reaching cheekpieces of the Corinthian-style helmet. Its two-part construction (with separate crown) is also unusual. With so few known helmets from Late Iron Age Britain, it is hard to say if unique examples like the Waterloo and Snettisham helmets are rare survivals from well-established traditions, or were designed and executed as one-off, singular pieces that would have marked the wearers out, perhaps both on the battlefield and in their communities. The fact that the helmet seems to have been deposited incomplete suggests that it may have been of some age by the time it was buried.

Hoard G (upper pit)

Recovered during the BM 1990 excavations. All finds from the upper Hoard G pit unless otherwise stated.

G.1: Gold/silver alloy torc (Pl. 14.40)
MSCC: (4P)R
BM: 1991,0407.1; Site code: SN/AQ
Gold/silver alloy torc with Stage II neck-ring formed from four circular-section wires plied together. Simple teardrop-shaped cast-on ring terminals, each extending into two pairs of wires which form the four neck-ring strands.
Wt: 101.2g; D(ext): 156.0mm; D(nr): 6.5mm; D(wire): 4.0mm; D(term): 21.2mm

G.2: Copper alloy torc (Pl. 14.40)
MSCC: (6C)T
BM: 1990,1101.23; Site code: SN/BP; SN/CD; SN/CE; SN/CF; SN/CG
Fragments of copper alloy multi-strand torc, comprising parts of the neck-ring, heavily fragmented, and one simple buffer terminal with a plain face and incised cordon around the edge. Many additional unjoined wire fragments. Originally the Stage II neck-ring was formed from six twisted wires coiled around a hollow core. Much of the damage is post-depositional, caused by animal burrowing. However, not all of the torc was recovered (one terminal is missing), so it is most likely that the torc was incomplete when it entered the ground.
Wt: 47.8g; D(nr): 13.8mm; D(wire): 2.0mm; D(term): 9.5mm

G.1

G.2

G.3

G.4

0 5 10cm

Plate 14.40

Plate 14.41

G.?2: Copper alloy torc (Pl. 14.40)
MSCC: ?(6C)T
BM: 1990,1101.24; Site code: SN/BO; SN/BQ; SN/CW; SN/DB; SN/DD; SN/DF; SN/DL; SN/DQ; SN/DT(ii); SN/FC; SN/FG; SN/GE; SN/GG; SN/JG
Context details: Found loose around top level of Hoard G, and in Hoard G upper pit.
Fragments of copper alloy twisted wire, each broken at both ends and coiled. Originally part of a coiled multi-strand torc neck-ring.
Not pictured.
Most likely part of torc G.2

G.3: Gold/silver alloy torc (Pl. 14.40)
MSCC: (2P)R
BM: 1991,0407.2; Site code: SN/CH
Gold/silver alloy multi-strand torc, with single-loop terminals and Stage II neck-ring of two circular-section wires plied together. Each terminal is a continuous loop, extending to form the two neck-ring wires. On one terminal, a soldered seam is visible in the interior where the wire ends must originally have joined.
Wt: 121.8g; D(ext): 170.0mm; D(nr): 7.5mm; D(wire): 3.8mm; D(term): 27.8mm

G.4: Gold/silver alloy torc (Pl. 14.40)
MSCC: (2P(2P))R
BM: 1991,0407.3; Site code: SN/CI
Gold/silver alloy multi-strand torc with small triple-loop terminals and Stage III neck-ring. The cable is formed from two ropes plied together, each of which is made up of two circular-section wires which are themselves plied together. The terminals are formed from the ends of the neck-ring wires: on each side, one of the ropes forms a continuous single loop, while the other forms a continuous double loop. Soldered areas obscure the joins of the wire ends.
Wt: 89.5g; D(ext): 167.0mm; D(nr): 7.3mm; D(rope): 3.8mm; D(wire): 2.1mm; D(term): 10.3mm

G.5a–d: Composite group (interlinked) (Pl. 14.41)
BM: 1991,0407.4; Site code: SN/CK
Ring G.5b is looped through one of the terminals of torc G.5a. Rings G.5c and G.5d are looped through the other terminal.
Wt: 233.1g (total for G.5a–d)

G.5a: Gold/silver alloy torc
MSCC: (2PZ(2P))R
Gold/silver alloy multi-strand torc with triple-loop terminals and Stage III neck-ring. The cable is formed from two ropes plied together Z-twist, each of which is made up of two circular-section wires which are themselves plied together. The terminals are formed from the ends of the neck-ring wires: on each side, one of the ropes forms a continuous single loop, while the other forms a continuous double loop. Soldered areas obscure the joins of the wire ends.
D(ext): 183.0mm; D(nr): 12.3mm; D(rope): 6.8mm; D(wire): 3.5mm; D(term): 27.8mm

G.5b: Gold/silver alloy small ring
Gold/silver alloy small ring with flat, abutting terminals. Made from a strip with rectangular cross-section.
D(ext): 24.6mm

G.5c: Gold/silver alloy small ring
Fragment of gold/silver alloy small ring made from a strip with rectangular cross-section. The cut ends are pinched together, giving the fragment a teardrop shape.
L: 16.5mm

G.5d: Gold/silver alloy small ring
Complete gold/silver alloy small spiral ring with rounded ends, made from a narrow strip with sub-rectangular cross-section.
D(ext): 33.8mm

G.6: Copper alloy torc (Pl. 14.41)
MSCC: (3P(2P))R
BM: 1990,1101.12; 1990,1101.14; Site code: SN/CL; SN/BR
[Analysed: see Ch. 17]
Silvered and gilded copper alloy multi-strand torc with triple-loop terminals and Stage III neck-ring. The surface treatment of this torc is very unusual (see Ch. 17, **Fig. 17.51b**). The cable is formed from three ropes plied together, each of which is made up of two circular-section wires which are themselves plied together. The terminals are formed from the ends of the neck-ring wires: on each side, each of the three ropes forms a continuous single loop. Soldered areas obscure the joins of the wire ends. Previously restored from fragments. One loop terminal remains separate.
Wt: 102.6g; D(ext): 170.0mm; D(nr): 17.8mm; D(rope): 5.9mm; D(wire): 3.1mm; D(term): 38.0mm

G.7: Gold/silver alloy torc (Pl. 14.41)
MSCC: (2P)R
BM: 1991,0407.5; Site code: SN/CM
Near-complete gold/silver alloy multi-strand torc, with one (slightly distorted) double-loop terminal and neck-ring. The other terminal appears to have been deliberately broken off. Stage II construction of two circular-section wires plied together. The remaining terminal has two open loops, each formed by the ends of one of the neck-ring wires.
Wt: 67.8g; D(ext): 162.0mm; D(nr): 5.2mm; D(wire): 2.9mm; D(term): 11.0mm

G.8: Copper alloy torc (Pl. 14.41)
MSCC: (4C)2T+2R
BM: 1990,1101.16; Site code: SN/CN
Gilded copper alloy multi-strand torc, heavily corroded, with overlapping buffer terminals with flat faces and rounded edges. Stage II neck-ring of four wires coiled together, alternating twisted and circular-section wires. Previously restored from fragments.
D(ext): 147.0mm; D(nr): 7.0mm; D(wire): 2.0mm; D(term): 10.0mm

G.9: Gold/silver alloy torc (Pl. 14.42)
MSCC: (2P)R
BM: 1991,0407.6; Site code: SN/CO
Gold/silver alloy multi-strand torc, with Stage II neck-ring formed of two circular-section wires plied together. The

G.9

G.12

G.10

G.11

0 5 10cm

Plate 14.42

G.13

G.14

G.15

G.16

0 5 10cm

Plate 14.43

slightly thickened ring terminals are continuous loops formed from the ends of the neck-ring wires.
Wt: 110.9g; D(ext): 160.0mm; D(nr): 6.8mm; D(wire): 3.6mm; D(term): 18.6mm

G.10: Copper alloy torc (Pl. 14.42)
MSCC: (3C)R
BM: 1990,1101.17; Site code: SN/CP
Gilded copper alloy multi-strand torc, heavily corroded. Simple buffer terminals (of a different alloy and better preserved than the neck-ring) have rounded edges and projecting flat ends with cordon around the edge, giving a thistle-like shape. Stage II neck-ring of three circular-section wires coiled together. Previously restored from fragments.
D(ext): 136.6mm; D(nr): 7.9mm; D(wire): 3.5mm; D(term): 9.3mm

Hoard G (lower pit)

Recovered during the BM 1990 excavations. All finds from the lower Hoard G pit unless otherwise stated.

G.11: Gold/silver alloy torc (Pl. 14.42)
MSCC: (4P)R
BM: 1991,0407.7; Site code: SN/EA
Gold/silver alloy massive multi-strand torc. Stage II neck-ring made from four rods, plied around each other. They are only very slightly loosely plied, with each strand passing under or over the others only once. The bars are roughly finished with no attempt to remove hammer marks etc. The simple ring terminals are crudely formed, their surfaces covered with dents and imperfections, and very obvious joins where they have been cast onto the neck-ring. One terminal has an addition on the inside and at one edge. These could be from the wax model stage, but are more likely areas of additional metal which have been added to fix a flaw in the casting. On the outside, each terminal has the appearance of two adjoining loops with their ends meeting the four neck-ring wires, but there is no division inside the eye of the terminal; each is a single moulding.
Wt: 2395.0g; D(ext): 225.0mm; D(nr): 25.9mm; D(wire): 10.3mm; D(term): 44.2mm

G.12: Copper alloy torc (Pl. 14.42)
MSCC: (6C)T
BM: 1990,1101.19; Site code: SN/DW; SN/DY; SN/DZ; SN/FD; SN/FL; SN/FT; SN/GF
Copper alloy gilded multi-strand torc, heavily corroded, with simple buffer terminals, one very poorly preserved. Stage II neck-ring of six twisted wires coiled together. Previously restored from fragments, now in seven main parts with many additional loose fragments.
D(nr): 6.0mm; D(wire): 2.0mm; D(term): 13.0mm

G.13: Copper alloy torc (Pl. 14.43)
MSCC: (7C)Q
BM: 1990,1101.1; Site code: SN/FO
Copper alloy multi-strand torc, possibly gilded, with Stage II neck-ring formed from seven flat/rectangular-section wires coiled together. One simple buffer terminal, with slightly convex face and raised inner and outer cordons, survives. The other end of the neck-ring is bound with a strand of organic material, possibly used as a repair to secure the wires in place of the missing terminal. The torc is slightly distorted at the back where one of the strands is broken.
Wt: 52.1g; D(ext): 133.3mm; D(nr): 5.6mm; D(wire): 1.8mm; D(term): 10.1mm

G.14: Copper alloy small torc (Pl. 14.43)
MSCC: (2PZ)F
BM: 1990,1101.25; Site code: SN/DX; SN/GH
Near-complete copper alloy small multi-strand torc, with double-loop terminals, one of which is missing a loop (see **Fig. 20.33**). Stage II neck-ring of two faceted wires plied together Z-twist. The complete terminal is a continuous double-loop, extending into the neck-ring wires. Previously re-joined from fragments; the missing terminal loop could be due to post-depositional disturbance.
Wt: 47.0g; D(ext): 102.4mm; D(nr): 6.3mm; D(wire): 2.9mm; D(term): 22.9mm

G.?14: Copper alloy torc (Pl. 14.43)
MSCC: ?
BM: 1990,1101.26; Site code: SN/FO(ii)
Tiny fragments of copper alloy, heavily corroded. Possibly part of the missing terminal from torc G.14, or one of the more heavily corroded torcs from the upper pit of Hoard G.
Not pictured
Wt: 0.7g

G.15: Copper alloy torc (Pl. 14.43)
MSCC: (8C)4T+4Q
BM: 1990,1101.27; Site code: SN/FU; SN/FW(i)
Copper alloy multi-strand torc with Stage II neck-ring formed from eight wires coiled together. Four of the wires (all adjoining) are flat/rectangular in section, and the other four are twisted. One simple buffer terminal with flat face and grooved cordon remains. The torc is heavily fragmented, largely due to post-depositional disturbance, but the fact that only one terminal has been recovered suggests that it could have been incomplete when it was deposited.
Wt: 27.0g; D(nr): 5.0mm; D(wire): 1.2mm; D(term): 8.3mm

G.?12/15: Copper alloy torc (Pl. 14.43)
BM: 1990,1101.28; Site code: SN/BS; SN/BT; SN/BV; SN/CD(ii); SN/CJ; SN/CX; SN/CY; SN/CZ; SN/DG; SN/DJ; SN/DK; SN/DN; SN/DP; SN/DU(i); SN/DV(i); SN/FB; SN/FH; SN/FI; SN/FM; SN/FN; SN/FV; SN/FW(ii); SN/GB; SN/GC; SN/HF
Context details: Found loose around and within Hoard G pit.
Fragments of copper alloy coiled twisted and square-section wire, all short sections, broken at both ends. Originally part of a coiled multi-strand torc neck-ring.
Most likely part of either torc G.12 or G.15.
Not pictured.

G.16: Copper alloy torc (Pl. 14.43)
MSCC: (5C(2P))R
BM: 1990,1101.29; Site code: SN/DA; SN/FX; SN/GU; SN/HB; SN/HC
[Analysed: see Ch. 19]
Fragmented copper alloy multi-strand torc with one

remaining simple buffer terminal with flat face. Stage III neck-ring of five coiled ropes, each of which is made up of two circular-section wires plied together. One of the neck-ring fragments has been bound with an organic string, perhaps a repair, identified as lime bast fibres (see Ch. 19, **Fig. 19.2**). The terminal is broken off from the torc to reveal a 'plug' which projected into the neck-ring and stubs of some of the neck-ring wires, showing that the terminal was cast on. The torc is heavily fragmented, with many unjoined fragments from throughout the lower half of the lower Hoard G pit: the terminal was below G.11, some of the strands about the level of G.17–G.20 and others in areas of disturbance (likely animal burrows) at the side of the pit. This fragmentation and scattering is most likely mainly due to post-depositional disturbance, but the torc was probably incomplete when it entered the ground.
Wt: 16.7g; D(nr): 8.2mm; D(rope): 2.0mm; D(wire): 1.0mm; D(term): 11.8mm

G.?16: Copper alloy torc (Pl. 14.43)
MSCC: (?5C(2P))R
BM: 1990,1101.13; Site code: SN/BU; SN/CL; SN/DI; SN/DS; SN/DT(i); SN/DU(ii); SN/DV(ii); SN/GI
Context details: Found loose around and within Hoard G pit.
Fragments of copper alloy circular-section wire, all short sections, broken at both ends. Curved in a way which suggests they were originally part of a plied and coiled Stage III construction in a multi-strand torc neck-ring.
Very likely part of torc G.16.
Not pictured

G.17: Gold/silver alloy large ring (Pl. 14.44)
BM: 1991,0407.8; Site code: SN/GQ
Complete gold/silver alloy large ring with overlapping, tapered terminals. Made from a strip with rectangular cross-section.
Wt: 108.0g; D(ext): 108.4mm; W: 11.5mm; T: 4.2mm

G.18: Gold/silver alloy large ring (Pl. 14.44)
BM: 1991,0407.9; Site code: SN/GR
Complete gold/silver alloy large ring with overlapping, tapered terminals. Made from a strip with rectangular cross-section.
Wt: 64.8g; D(ext): 104.8mm; W: 7.0mm; T: 3.4mm

G.19: Gold/silver alloy large ring (Pl. 14.44)
BM: 1991,0407.10; Site code: SN/GS
Gold/silver alloy large penannular ring made from a strip with rectangular cross-section. One terminal is flat and hardly tapering, the other tapers sharply, almost to a point.
Wt: 93.0g; D(ext): 93.2mm; W: 8.7mm; T: 4.5mm

G.20: Copper alloy large ring (Pl. 14.44)
BM: 1990,1101.2; Site code: SN/GT
Complete copper alloy large ring with flat, abutting terminals. Made from a strip with rectangular cross-section.
Wt: 49.2g; D(ext): 93.6mm; W: 7.8mm; T: 2.4mm

Hoard H (upper pit)

Recovered during the BM 1990 excavations. All finds from the upper Hoard H pit.

H.1: Copper alloy torc (Pl. 14.45)
MSCC: (6C)?R
BM: 1990,1101.18; Site code: SN/AW; SN/CR
Copper alloy multi-strand torc, heavily corroded, with simple flat buffer terminals with slightly rounded edges and Stage II neck-ring of six ?circular-section wires coiled together. Broken into three pieces when found, the damage perhaps due to large pieces of carrstone in the filling of the pit. Two of the fragments are now re-joined. Many additional unjoined fragments.
Wt: 121.2g; D(ext): 145.0mm; D(nr): 10.0mm; D(wire): 2.5mm; D(term): 14.5mm

H.2a–b: Composite group (plied/twisted) (Pl. 14.45)
BM: 1991,0407.11; Site code: SN/CS
Torcs H.2a and H.2b are plied/twisted together to make a composite torc.
Wt: 240.0g (total for H.2a and H.2b)

H.2a: Gold/silver alloy torc
MSCC: (2PZ(2P))R
Gold/silver alloy multi-strand torc with triple-loop terminals and Stage III neck-ring. The cable is formed from two ropes plied together Z-twist; each rope is made up of two circular-section wires which are themselves plied together. The terminals are formed from the ends of the neck-ring wires: on each side, one of the ropes forms a continuous single loop, while the other forms a continuous double loop. Soldered areas obscure the joins of the wire ends.
D(ext): 174.0mm; D(nr): 12.3mm; D(rope): 7.0mm; D(wire): 2.8mm; D(term): 23.2mm

H.2b: Gold/silver alloy torc
MSCC: (2P)R
Gold/silver alloy torc with Stage II neck-ring formed from two circular-section wires plied together. Simple thickened ring terminals, each a continuous ring extending into the two neck-ring strands.
D(ext): 174.0mm; D(nr): 8.6mm; D(wire): 3.8mm; D(term): 18.0mm

H.3: Gold/silver alloy torc (Pl. 14.45)
MSCC: (2P)R
BM: 1991,0407.12; Site code: SN/CT
Gold/silver alloy multi-strand torc with hook terminals and Stage II neck-ring of two circular-section wires plied very loosely together (see **Fig. 20.13**). At each terminal, one neck-ring wire ends sharply, while the other continues into a hook. The hooks have been hammered flat. The torc may be complete as it stands, though it is the only example of this terminal type. Alternatively, it may originally have had complete loop terminals, or it may be an incomplete ring terminal torc, where the additional metal has not yet been cast on.
Wt: 97.3g; D(ext): 157.0mm; D(nr): 8.4mm; D(wire): 4.2mm

G.17

G.18

G.19

G.20

0 5 10cm

Plate 14.44

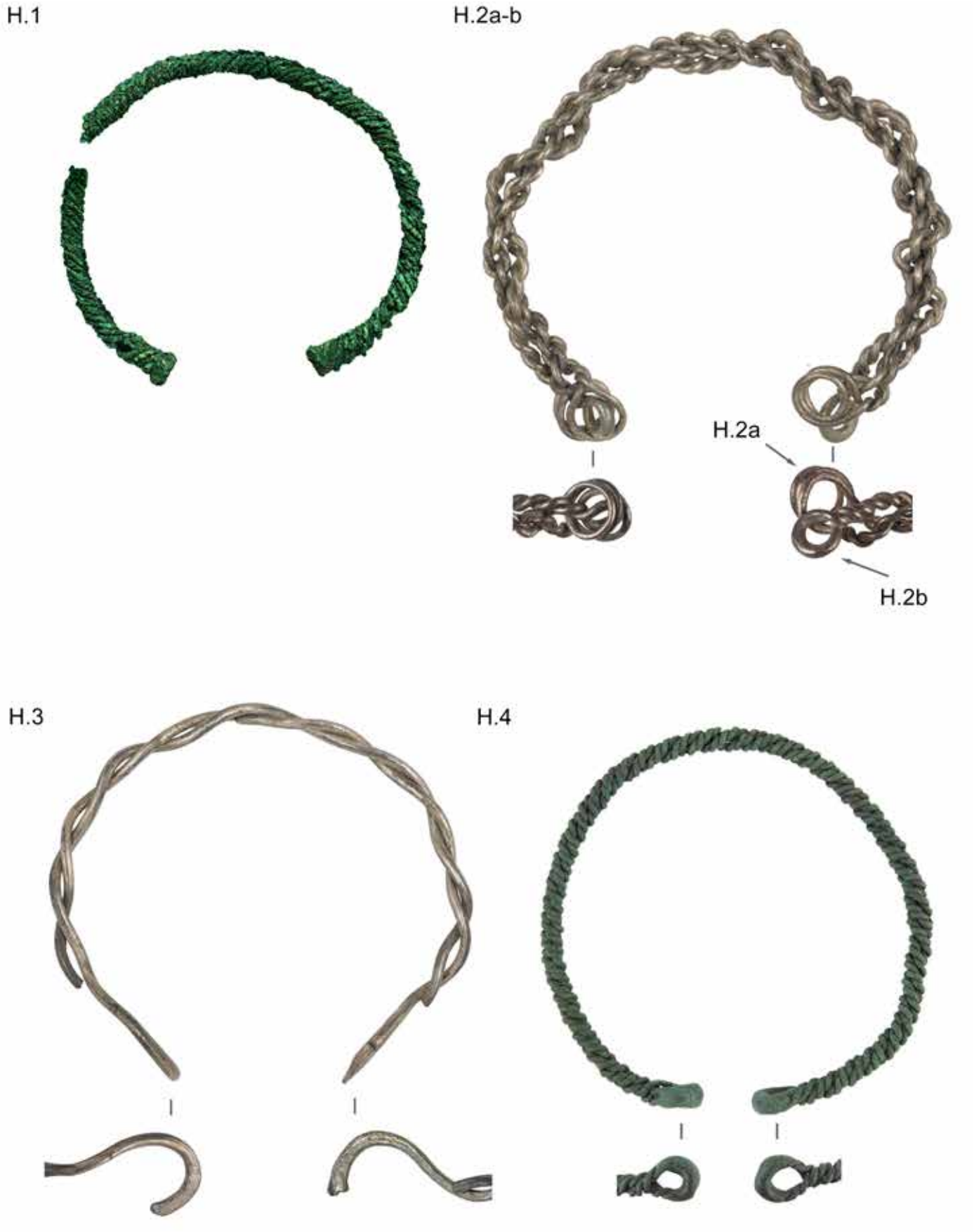


Plate 14.45

H.5

H.6

H.7

0 5 10cm

Plate 14.46

H.4: Copper alloy torc (Pl. 14.45)
MSCC: (3P(2P))R
BM: 1990,1101.3; Site code: SN/CU
Copper alloy multi-strand torc with ring terminals and Stage III neck-ring formed from three plied ropes, each of which is made up of two circular-section wires plied together. The ring terminals are cast onto the ends of the neck-ring wires. Each terminal forms a continuous loop, extending on one side into one of the ropes and on the other side into the remaining two ropes.
Wt: 186.6g; D(ext): 145.0mm; D(nr): 8.0mm; D(rope): 3.8mm; D(wire): 2.1mm; D(term): 19.0mm

H.5: Gold/silver alloy torc (Pl. 14.46)
MSCC: (4C)R
BM: 1991,0407.13; Site code: SN/CV
Gold/silver alloy multi-strand torc with triple-loop terminals and Stage II neck-ring of four circular-section wires coiled together. The terminals are formed from the ends of the neck-ring wires: on each side, one pair of neck-ring wires forms a continuous single loop, while the other forms a continuous double loop. Soldered or hammered areas obscure the joins of the wire ends.
Wt: 120.0g; D(ext): 153.0mm; D(nr): 7.0mm; D(wire): 3.1mm; D(term): 18.0mm

H.6: Gold/silver alloy torc (Pl. 14.46)
MSCC: (2P(2PZ))R
BM: 1991,0407.14; Site code: SN/DR
Gold/silver alloy multi-strand torc with triple-loop terminals and Stage III neck-ring. The cable is formed from two ropes plied together, each of which is made up of two circular-section wires which are themselves plied together Z-twist. The terminals are formed from the ends of the neck-ring wires: on each side, the wires of one rope form a continuous single loop, while the wires of the other form a continuous double loop. Soldered areas obscure the joins of the wire ends. The whole torc is slightly distorted, with the terminals slightly overlapping.
Wt: 119.1g; D(ext): 154.0mm; D(nr): 9.0mm; D(rope): 4.2mm; D(wire): 2.3mm; D(term): 18.0mm

Hoard H (lower pit)

Recovered during the BM 1990 excavations. All finds from the lower Hoard H pit.

H.7: Gold/silver alloy torc (Pl. 14.46)
MSCC: (4CZ(3P(3P)))R
BM: 1991,0407.15; Site code: SN/FJ
Gold/silver alloy multi-strand torc with complex ring terminals. Each cast terminal consists of a double ring, with the two rings joined by a central band decorated with raised knobs, each with three dots (see Ch. 21 for discussion of decoration). The same dotted knob motif decorates the front part of the join between the terminal and the neck-ring. The Stage IV neck-ring is made up of four cables coiled together Z-twist. Each cable comprises three ropes plied together, and each rope consists of three circular-section wires plied together. The torc was slightly compressed in the pit, springing back into shape when lifted.
Wt: 1208.3g; D(ext): 206.0mm; D(nr): 22.0mm; D(cable): 7.3mm; D(rope): 3.5mm; D(wire): 1.2mm; D(term): 36.0mm

H.8: Copper alloy torc (Pl. 14.47)
MSCC: (6C)?Q
BM: 1990,1101.4; Site code: SN/FK; SN/FZ
Copper alloy multi-strand torc with Stage II neck-ring formed from six wires coiled together. The wires are heavily corroded, but may be squarish in cross-section. Simple buffer terminals with flat faces and rounded edges. Previously restored from separate fragments.
Wt: 122.5g; D(ext): 152.0mm; D(nr): 8.6mm; D(wire): 2.3mm; D(term): 13.4mm

H.9: Copper alloy torc (Pl. 14.47)
MSCC: (4C)R
BM: 1990,1101.8; Site code: SN/FY; SN/GK; SN/GL
Copper alloy multi-strand torc with Stage II neck-ring formed from four circular-section wires coiled around an organic core. Slightly overlapping simple buffer terminals with flat faces and rounded edges. Previously restored from separate sections; a sample of the charcoal core was also retained.
Wt: 56.7g; D(ext): 119.0mm; D(nr): 5.7mm; D(wire): 1.6mm; D(term): 11.2mm

H.10: Copper alloy torc (Pl. 14.47)
MSCC: (4C(2P))R
BM: 1990,1101.5; Site code: SN/GO
Gilded copper alloy multi-strand torc with Stage III neck-ring and simple buffer terminals with flat faces and rounded edges. The cable is formed of four coiled ropes, each of which is made up of two circular-section wires plied together.
Wt: 96.3g; D(ext): 132.0mm; D(nr): 8.0mm; D(rope): 2.3mm; D(wire): 1.2mm; D(term): 14.0mm

H.11: Copper alloy torc (Pl. 14.47)
MSCC: (2P)R
BM: 1990,1101.6; Site code: SN/GP
Copper alloy multi-strand torc with double-loop terminals and Stage II neck-ring of two circular-section wires plied loosely together (see **Fig. 20.33**). Each double-loop terminal is made up of two open loops, each formed from the curved end of one of the neck-ring wires. One of the wires is significantly more corroded than the other, suggesting a possible difference in alloy or surface treatment.
Wt: 96.7g; D(ext): 127.0mm; D(nr): 9.0mm; D(wire): 4.6mm; D(term): 24.4mm

Hoard J

Recovered during the BM 1990 excavations. All finds from the Hoard J pit unless otherwise stated.

J.1: Gold/silver alloy torc (Pl. 14.48)
MSCC: ?
BM: 1991,0407.42; Site code: SN/GV; SN/GW; SN/GX; SN/GZ; SN/HG; SN/JX
Context details: Found in plough scatter around Hoard J.
Fragments from a gold/silver alloy multi-strand torc

H.8

H.9

H.10

H.11

0 5 10cm

Plate 14.47

including the remains of a double-loop terminal, and additional wire fragments from the neck-ring. The torc is very fragmentary, and cannot be fully reconstructed, suggesting that it may not have been complete when it was deposited.
Possibly part of the same torc as S.54.
Wt: 12.8g (largest frags); D(wire): 3.8mm; D(term): 26.8mm; L: 29.0 mm (max.)

J.2: Gold/silver alloy torc (Pl. 14.48)
MSCC: (3P(2PZ))R
BM: 1991,0407.41; 1991,0407.55; Site code: SN/HA; SN/KZ
Context details: Found in plough scatter around Hoard J.
Fragments from a gold/silver alloy multi-strand torc including a short length of neck-ring, broken at both ends, and a single-loop terminal with one flat end and one broken end where it would most likely have continued into the neck-ring wires. Stage III construction of three ropes plied together, each of which is made up of two circular-section wires which are themselves plied together Z-twist. The torc is very fragmentary, and cannot be fully reconstructed, suggesting that it may not have been complete when it was deposited.
Probably part of the same torc as S.20
Wt: 20.6g; D(nr): 11.8mm; D(rope): 6.8mm; D(wire): 2.3mm; D(term): 23.2mm; L: 65.7 mm (max.)

J.3: Copper alloy torc (Pl. 14.48)
MSCC: (?C)T
BM: 1990,1101.30; Site code: SN/EV; SN/GY; SN/HD; SN/HL; SN/HR; SN/JC; SN/HE; SN/HH; SN/HJ; SN/HK; SN/HM
Context details: Found in plough scatter around Hoard J, and in Hoard J pit.
Fragments of a copper alloy multi-strand torc. Heavily fragmented, most likely disturbed by ploughing. All that remains are a single plain buffer terminal with one strand of the neck-ring protruding from the back, and a small number of twisted wire fragments, curved in a way which suggests they were once part of a coiled Stage II neck-ring. This partial recovery suggests that the torc was most likely incomplete when it entered the ground.
Wt: 36.1g; D(wire): 3.1mm; D(term): 22.2mm

J.4: Copper alloy torc (Pl. 14.48)
MSCC: (3P(2P))R
BM: 1990,1101.32; Site code: SN/HO; SN/JF; SN/JY
Two fragments of a copper alloy multi-strand torc neck-ring, each broken at both ends. Stage III construction of three plied ropes, each of which is formed from two circular-section wires plied together. The torc has been disturbed by ploughing, but the partial recovery suggests that it may not have been complete when it entered the ground.
Wt: 14.3g; D(nr): 5.7mm; D(rope): 2.8mm; D(wire): 1.5mm; L: 95.8 mm (max.)

J.5a–c: Composite group (interlinked) (Pl. 14.48)
The terminals of torc fragments J.5b and J.5c were originally looped onto copper alloy torc J.5a.

J.5a: Copper alloy torc
MSCC: (6C)T
BM: 1990,1101.31; Site code: SN/JD; SN/JL; SN/JM; SN/JN; SN/JE; SN/JK
Fragments of a copper alloy multi-strand torc. Heavily fragmented, most likely disturbed by ploughing. What remains are fragments of neck-ring, each broken at both ends, and one plain buffer terminal. Stage II construction of six twisted wires coiled around a hollow core. As far as can be reconstructed, the fragmentary torc has been tightly bent into a V-shape in at least one place. The partial recovery suggests that the torc was most likely incomplete when it entered the ground.
Wt: 12.4g; D(nr): 4.8mm; D(wire): 1.8mm; D(term): 7.3mm

J.5b: Gold/silver alloy torc
MSCC: (4CZ(2P))R
BM: 1991,0407.18; Site code: SN/JQ
Fragment of gold/silver alloy multi-strand torc, comprising a simple ring terminal, and a length of neck-ring, cut at the other end. Stage III construction of four ropes coiled together Z-twist, each of which is made up of two circular-section wires plied together. The ring terminal is cast onto the ends of the neck-ring wires. It forms a continuous loop, extending into the two pairs of ropes which form the four neck-ring ropes. All the neck-ring strands are sharply cut at the break, but the ends appear worn, suggesting the object may have been in circulation or use for some time between breakage and deposition.
Wt: 136.1g; D(nr): 9.8mm; D(rope): 4.6mm; D(wire): 2.0mm; D(term): 22.6mm; L: 153.0mm

J.5c: Gold/silver alloy torc
MSCC: (2P)R
BM: 1991,0407.17; Site code: SN/JP
Fragment of gold/silver alloy multi-strand torc comprising one loop terminal and a length of neck-ring, broken and distorted at the other end, with the wires pulled apart. Stage II construction of two circular-section wires plied together. The simple terminal is a continuous loop, extending to form the two neck-ring wires.
Wt: 298.1g; D(nr): 10.4mm; D(wire): 5.2mm; D(term): 22.7mm; L: 137.7mm

J.6: Gold/silver alloy torc (Pl. 14.49)
MSCC: (2CZ(2P))R
BM: 1991,0407.16; Site code: SN/JO
Gold/silver alloy multi-strand torc, with slightly thickened double-ring terminals. Stage III construction of two ropes coiled together Z-twist, each of which is made up of two circular-section wires plied together. The terminals are formed from the ends of the neck-ring wires: on each side, the two wires from each of the two ropes form a continuous loop; the thickened ends obscure the joins of the wires.
Wt: 518.0g; D(ext): 203.0mm; D(nr): 16.5mm; D(rope): 9.7mm; D(wire): 4.6mm; D(term): 36.0mm

J.7: Gold/silver alloy torc (Pl. 14.49)
MSCC: (2P(2P))R
BM: 1991,0407.19; Site code: SN/JR

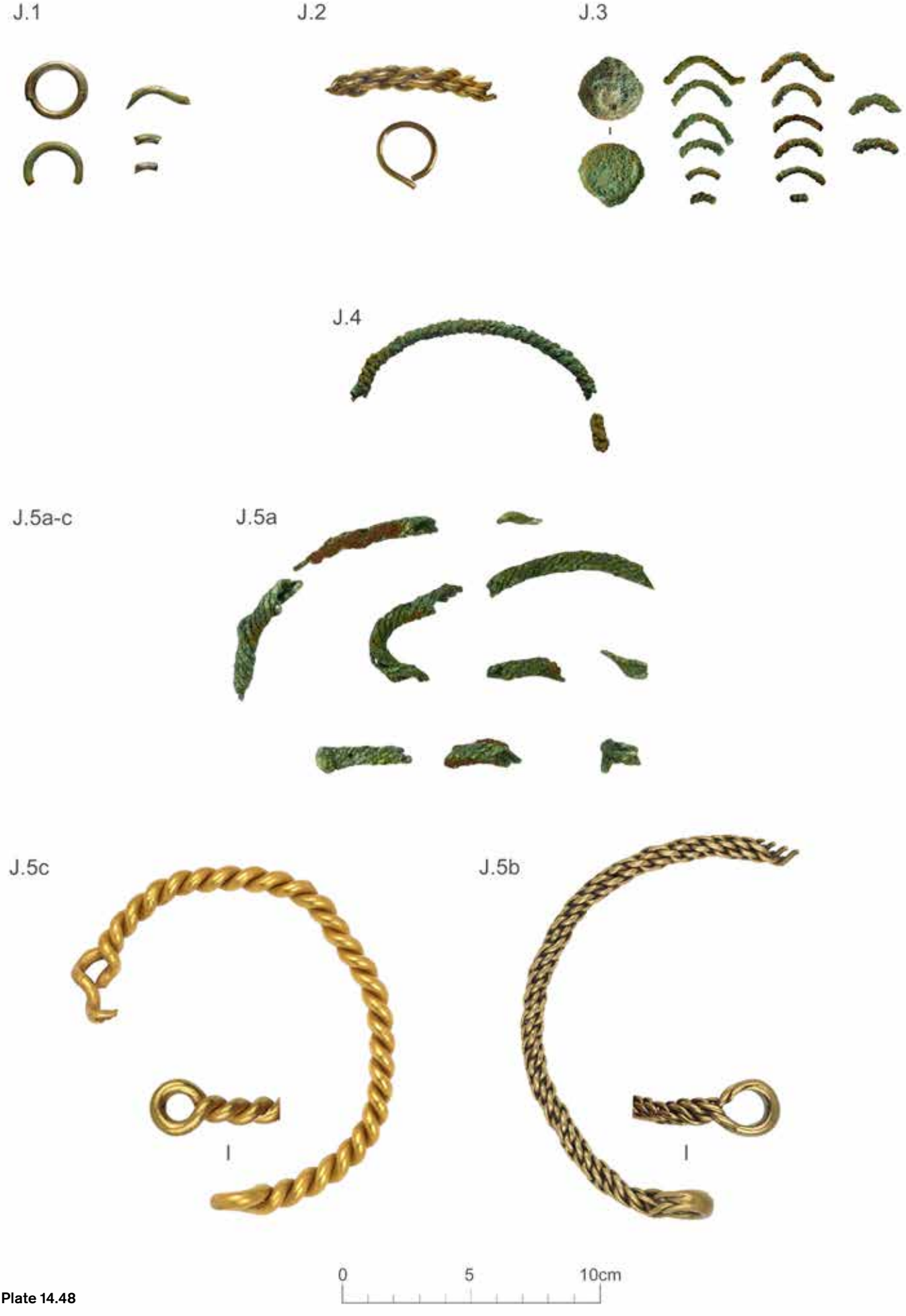


Plate 14.48

Gold/silver alloy multi-strand torc with ring terminals and Stage III neck-ring. The cable is formed of two ropes plied together, each of which is made up of two circular-section wires plied together. The ring terminals are cast onto the ends of the neck-ring wires. Each forms a continuous loop, extending into the two neck-ring ropes.
Wt: 469.3g; D(ext): 166.0mm; D(nr): 17.7mm; D(rope): 8.0mm; D(wire): 3.6mm; D(term): 26.5mm

J.?: Copper alloy torc
MSCC: ?
BM: 1990,1101.33; Site code: SN/HN
Fragments of wires from copper alloy multi-strand torc(s). Found in soil sample.
Possibly associated with Hoard J, but cannot be assigned to a particular torc.
Not pictured

Hoard K

Recovered during the BM 1990 excavations. All finds from the Hoard K pit.

K.1: Copper alloy torc (Pl. 14.50)
MSCC: (2P)R
BM: 1990,1101.34; Site code: SN/LA; SN/LB; SN/LC; SN/LD; SN/MC; SN/MD; SN/MF; SN/MH; ?ST/AC; ?ST/AJ
Copper alloy multi-strand torc with ring terminals, intentionally fragmented into at least 10 sections (see Ch. 16 for details of the conservation process). Possibly cast rather than forged, the Stage II neck-ring is formed from thick rods. These two rods cross only twice, once behind each terminal, and otherwise seem to lie parallel rather than being plied together. Simple, thickened ring terminals emerge from the ends of the rods, perhaps cast in one piece.
Wt: 369.5g; D(ext): 160.0 (approx)mm; D(nr): 15.7mm; D(wire): 7.8mm; D(term): 40.0mm

K.2: Copper alloy torc (Pl. 14.50)
MSCC: (?C)T+Q
BM: 1990,1101.35; Site code: SN/LE; SN/LG; SN/LJ; SN/LM; SN/LO; SN/LP; SN/LQ; SN/LR; SN/LS; SN/LT; SN/MA; SN/MB; SN/MG
Fragments of a gilded copper alloy multi-strand torc neck-ring, both terminals missing. The wire fragments have not been reconstructed, but suggest a Stage II coiled construction of a combination of twisted and square-section wires, some showing traces of gilding. Only a representative sample of the large number of wire fragments was photographed. The torc may have been near-complete when it was deposited, and have been disturbed by ploughing and burrowing animals.
D(wire): 3.2mm

K.3: Copper alloy torc (Pl. 14.50)
MSCC: (6C)T
BM: 1990,1101.36; Site code: SN/LF; SN/LK; SN/LN
Gilded copper alloy multi-strand torc neck-ring, reconstructed from fragments, now in three main sections, both terminals missing. One of the ends has been deliberately cut. Stage II construction of six twisted wires coiled around a hollow core. However, there is a highly unusual aspect to the construction: in one of the three sections, one of the six twisted wires is, in part, formed from two wires twisted together, i.e. (2P)R. This extends over only a very short length and could have been a way of joining two lengths of wire in an unobtrusive manner, since the plied construction closely resembles a single twisted wire at first glance. The torc may have been near-complete when it was deposited, and have been disturbed by ploughing and burrowing animals.
Wt: 28.7g; D(nr): 6.3mm; D(wire): 1.6mm

K.4: Copper alloy torc (Pl. 14.50)
MSCC: (3P(2P))R
BM: 1990,1101.37; Site code: SN/LL; SN/ME
Copper alloy multi-strand torc, with simple double-loop terminals and Stage III neck-ring. The cable is formed from three ropes plied together, each of which is made up of two circular-section wires plied together. One rope ends at each terminal, the other two form continuous loops (one of which is broken). The torc is complete but broken in two.
Wt: 25.3g; D(nr): 4.9mm; D(rope): 2.4mm; D(wire): 1.6mm; D(term): 15.3mm; L: 91.1mm

K.5: Gold/silver alloy torc (Pl. 14.51)
MSCC: (2PZ)R
BM: 1991,0407.20; Site code: SN/LV
Gold/silver alloy multi-strand torc with Stage II neck-ring formed from two circular-section wires plied together Z-twist. Simple ring terminals are formed from the thickened ends of the two neck-ring wires.
Wt: 402.0g; D(ext): 180.0mm; D(nr): 12.8mm; D(wire): 6.5mm; D(term): 36.4mm

K.6: Gold/silver alloy torc (Pl. 14.51)
MSCC: (2P)R
BM: 1991,0407.21; Site code: SN/LX
Gold/silver alloy multi-strand torc with Stage II neck-ring formed from two circular-section wires plied together. Simple ring terminals are formed from the thickened ends of the two neck-ring wires.
Wt: 358.0g; D(ext): 161.0mm; D(nr): 11.8mm; D(wire): 6.0mm; D(term): 23.2mm

K.7: Gold/silver alloy torc (Pl. 14.51)
MSCC: (8C)R
BM: 1991,0407.22; Site code: SN/LY
Gold/silver alloy multi-strand torc with ring terminals and Stage II neck-ring formed from eight circular-section wires coiled together around a hollow core. The terminals are merged double rings, cast onto the ends of the neck-ring wires, with a central groove between the two rings bearing a series of punched dots (see Ch. 21 for discussion of decoration).
Wt: 865.0g; D(ext): 199.0mm; D(nr): 18.7mm; D(wire): 4.5mm; D(term): 31.0mm

J.6

J.7

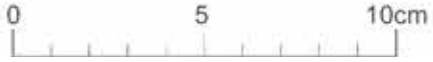
Plate 14.49

K.1

K.2

K.3

K.4



K.5

K.6

K.7

Plate 14.51

Hoard L (upper pit)

Recovered during the BM 1990 excavations. All finds from the upper Hoard L pit.

L.1: Gold/silver alloy torc (Pl. 14.52)
MSCC: (6C(2PZ(3P)))R
BM: 1991,0407.23; Site code: SN/NM
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc with cast-on torus terminals (see **Figs 20.7a–b, 20.10, 23.8**). The Stage IV neck-ring is formed from six cables coiled together around a hollow core. Each cable is formed from two ropes loosely plied together Z-twist, and each rope consists of three circular-section wires plied together. The hollow terminals are very thin castings, open in the interior of the eye, and with some holes, cracks and patches (the latter notably on the torus of one terminal and the collar of the other). Each terminal has a groove running down the centre of the torus, as if dividing it into two adjacent rings. Towards the collar, this groove expands to a triangular or trumpet shape. Each collar has an inner cordon and in places where it meets the neck-ring the casting is incomplete and some wires can be seen within, and merging with, the collar.

Notes from scientific analysis (Nigel Meeks)
This torc has a complex Stage IV neck-ring construction, similar to L.21a. In this case, the overall appearance of the neck-ring wires is somewhat asymmetrical and is much less uniform. The wire ropes are quite loosely twisted together, and this has resulted in a very flexible neck-ring. The wires are highly polished and heavily worn on the outer sides and there is deep wear between wires that have rubbed together over a long period of use in antiquity (see **Fig. 20.7a–b**), with the open, flexible structure tending to exacerbate the wear between wires.

The terminals are of open torus form and have been cast onto the prepared wires. There is extensive evidence of metal flow and infilling of the gaps during casting and solidification around and between the wires. The castings are imperfect and there is a large cold-shut (a gap where the metal solidified before fully filling the mould) on one terminal which appears to have been repaired in antiquity with an additional cast-on plug (see **Fig. 20.10**). In addition, there are several regions where the wires penetrate through the casting as the wax model was too thin (**Figs 14.32–3**). One terminal is also loose on the wires and the wire has broken through, enlarging the hole (**Fig. 14.32**). There are file marks around the neck of the terminal that also cut into the exposed wires, probably used to add definition to the casting (**Fig. 14.32**).

This torc is also very similar in wear patterns to L.21a. One wire is broken, most likely a fatigue fracture due to constant flexing during use. The wires also show many linear facets in protected regions showing the wires were not originally finished to a particularly round section. There are deep linear grooves clearly visible on several wires, indicating possible folded strip origin.
Wt: 656.8g; D(ext): 184.0mm; D(nr): 24.2mm; D(cable): 9.5mm; D(rope): 5.4mm; D(wire): 2.1mm; D(term): 36.6mm

Figure 14.32 Detail of join where wires meet terminal, showing wire visible through hole in the collar on torc L.1

Figure 14.33 Detail of join where wires meet terminal, with wires exposed at the ends of the collar on torc L.1

L.2: Gold/silver alloy torc (Pl. 14.52)
MSCC: (2P)F
BM: 1991,0407.24; Site code: SN/NO
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc with simple double-loop terminals and Stage II construction of two faceted rods plied together (see **Fig. 17.16**). Terminals are formed from the ends of the two neck-ring rods; each rod terminates in an open loop at each end, giving a double-loop terminal.

Notes from scientific analysis (Nigel Meeks)
The two thick rods which make up the torc are each heavily faceted, being octagonal along their entire length. The two rods are twisted together 19 full turns to create the neck-ring. This is probably as tightly twisted as can be achieved. The torc has double-loop non-fused terminals similar to torc L.7, and unlike the closed loops of e.g. G.1. The rod facets run parallel to each other, spiralling around with the neck-ring twists, which shows that the rods were not pre-twisted individually before the two rods were plied together as a pair, as can be seen on a few smaller square-section wire torcs (e.g. F.9a). They were simply twisted tightly together, producing a very uniform geometric pattern to the neck-ring.

L.1

L.2

L.3

Plate 14.52

A second feature seen on L.2 are linear grooves and striations that run along the length of the rods, particularly in protected regions within the spirals; some are fine and others are coarser (**Fig. 14.34**). This has been seen on many wires and rods of various thicknesses (Ch. 17). These lines scratched into the metal surface have apparently not been deformed by hammering, suggesting that they are part of a finishing process on the wires after faceting and before making into the neck-ring. Either they were caused by filing or by abrading during smoothing the wires to their final shape. Nevertheless, the wires were most likely not pulled through a drawplate as such, as the true function of a drawplate is to produce successively thinner round-section wires (Whitfield 1990), and there is no evidence of this on the Snettisham torcs (see Ch. 17 for a full discussion of wire manufacture).
Wt: 318.0g; D(ext): 188.0mm; D(nr): 10.7mm; D(wire): 7.1mm; D(term): 32.5mm

L.3: Gold/silver alloy torc (Pl. 14.52)
MSCC: (2P(2P))R
BM: 1991,0407.25; Site code: SN/NR
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc with double-ring terminals and Stage III neck-ring formed from two plied ropes, each of which is made up of two circular-section wires plied together. Each thickened ring terminal forms a continuous loop, extending into one of the two neck-ring ropes.

Notes from scientific analysis (Nigel Meeks)
Another variation on the theme of multi-strand thick wire torcs is exemplified by torc L.3. It comprises two Stage II components, each comprising two round-section wires plied together, with single-ring terminals. These two components are themselves twisted together, using mandrels through the two terminal loops at each end, to form a Stage III neck-ring. The resulting neck-ring is rather 'lumpy' or irregular because the overlapping wires do not lie comfortably together, and the effect is to produce a different texture to this torc compared to other more uniform types. On the loops of this torc the closing mechanism for completing the ring terminal was to cast-on extra metal. This is clearly seen in the plate, where much casting porosity is visible in the surface of the cast-on sections.
Wt: 202.6g; D(ext): 156.0mm; D(nr): 13.0mm; D(rope): 6.9mm; D(wire): 3.0mm; D(term): 21.2mm

L.4: Gold/silver alloy torc (Pl. 14.53)
MSCC: (3P(2P))R
BM: 1991,0407.26; Site code: SN/NW
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc with quadruple-ring terminals and Stage III neck-ring formed from three plied ropes, each of which is made up of two circular-section wires plied together (see **Fig. 17.60a–b**). The terminals are formed from the ends of the neck-ring wires: on each side, the wires of one rope form a continuous double-loop, while the wires of the other two ropes each form continuous single loops, giving a total of four loops on each terminal.

Figure 14.34 Fine striations visible in protected areas of the wires on torc L.2

Hammered overlap joins obscure the wire ends in the terminals.

Notes from scientific analysis (Nigel Meeks)
L.4 shows another variation on a similar Stage III construction to torc L.3, but with additional loop terminals, making four at each end. The wires are fairly round in section but retain evidence of many linear facets along their length and there is an overlap join on one of the loops where the ends of the wires are joined (see **Fig. 17.60a–b**). The exposed outer surfaces are polished from use wear while the recessed twists retain the angular linear facets.
Wt: 370.4g; D(ext): 162.0mm; D(nr): 14.7mm; D(rope): 7.5mm; D(wire): 3.1mm; D(term): 27.4mm

L.5: Copper alloy torc (Pl. 14.53)
MSCC: (5C(2P))R
BM: 1990,1101.10; Site code: SN/NY
Copper alloy multi-strand torc, possibly gilded, with simple buffer terminals and Stage III neck-ring formed from five ropes coiled around a hollow core, each of which is made up of two circular-section wires plied together. Reconstructed from fragments, now in four main pieces, with additional unjoined fragments.
Wt: 73.3g (four largest frags); D(ext): (approx.) 156.0mm; D(nr): 9.6mm; D(rope): 2.5mm; D(wire): 1.5mm; D(term): 14.3mm

L.6: Copper alloy torc (Pl. 14.53)
MSCC: (7C(2P))R
BM: 1990,1101.7; Site code: SN/NZ
[Analysed: see Ch. 17; Radiocarbon dated: See Table 5.2; See Ch. 16 for details of conservation work]
Copper alloy multi-strand torc with simple buffer terminals and Stage III neck-ring formed from seven ropes coiled around a hollow core, each of which is made up of two circular-section wires plied together (see **Figs 16.3–4**). The terminals have rounded edges and flat, undecorated ends. One terminal is more corroded than the other and the back of the torc, for a length of about 42mm, has been repaired by binding/wrapping with organic strip. Additional detached fragments of the binding strip are stored separately.

L.4

L.5

L.6

Plate 14.53

Notes from scientific analysis (Nigel Meeks)
The neck-ring is hollow in the centre which would make this copper alloy torc springy in the same manner as many of the gold alloy torcs. This is particularly important in this case as the terminals are only 25mm apart and it would need to be opened quite wide for putting on and taking off. The wires are heavily corroded with typical green copper corrosion products (and with what appears to be surface lacquer from conservation treatment). What makes this torc unique is the tightly wrapped organic material around the mid-point of the neck-ring, appearing as both a flat fibrous strip and as a plied string. This may originally have been added to repair or strengthen the torc at this point as there does appear to be some wire damage and thinning to the wires in this region. The organic material was identified by Caroline Cartwright (Ch. 19) as lime wood fibre string, and samples of this were radiocarbon dated (see **Table 5.2**).
Wt: 199.7g; D(ext): 149.1mm; D(nr): 12.5mm; D(rope): 3.6mm; D(wire): 2.5mm; D(term): 17.6mm

L.7: Gold/silver alloy torc (Pl. 14.54)
MSCC: (2P)R
BM: 1991,0407.27; Site code: SN/OA
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc with simple double-loop terminals and Stage II neck-ring formed from two circular-section wires loosely plied together (see **Fig. 17.59a–b**). The terminals are formed from the ends of the two neck-ring wires; each terminates in an open loop at each end, giving a double-loop terminal.

Notes from scientific analysis (Nigel Meeks)
The two thick, round-section wires which make up the torc are twisted together with seven full turns to form the Stage II neck-ring. The length of each wire is about 65cm, hence a total of around 130cm of wire was required for the complete torc. The wires are not perfectly rounded and show a number of flat areas, indentations and hammer marks, particularly towards the terminals (see **Fig. 17.59a–b**). The main exposed wire regions have rounded and smooth high points from use wear, compared with the protected inner areas. Each torc wire has a round loop terminal with the wire end closing the loop and touching the wire, but not soldered or fused to it. With the wires twisted together, this gives a double-loop terminal.
Wt: 347.7g; D(ext): 184.0mm; D(nr): 12.8mm; D(wire): 6.2mm; D(term): 31.2mm

Hoard L (lower pit)
Recovered during the BM 1990 excavations. All finds from the lower Hoard L pit.

L.8: Copper alloy torc/bracelet (Pl. 14.54)
MSCC: (2P(2P))R
BM: 1990,1101.9; Site code: SN/OS; SN/OT
Copper alloy multi-strand torc/bracelet with damaged double-loop terminals, in two pieces. One terminal has only a single loop remaining, and the neck-ring/body wires have been partially untwisted, suggesting the terminal was intentionally removed. Stage III construction of two ropes plied together, each made up of two circular-section wires plied together. At the complete end, each rope forms a single continuous loop, giving the double-loop terminal. Whilst some damage has occurred post-deposition, the torc was most likely deposited without the missing terminal loop.
Wt: 37.4g; D(nr): 6.2mm; D(rope): 3.4mm; D(wire): 2.0mm; D(term): 14.5mm; L: 112.0 mm (max.)

L.9: Copper alloy torc (Pl. 14.54)
MSCC: (2P(2P))R
BM: 1990,1101.11; Site code: SN/OL; SN/OL; SN/OU
Gilded copper alloy fragment from multi-strand torc, comprising one double-loop terminal and a section of neck-ring, partially untwisted at the broken end. Stage III construction of two ropes plied together, each made up of two circular-section wires plied together. The double-loop terminal is continuous, formed from the ends of one of the neck-ring ropes. The other rope is broken, but would probably originally also have terminated in a continuous loop or double loop, giving a triple- or quadruple-ring terminal.
Wt: 32.0g; D(nr): 13.0mm; D(rope): 6.3mm; D(wire): 2.9mm; D(term): 15.4mm; L: 102.4mm

L.10a–b: Composite group (interlinked) (Pl. 14.54)
Wires L.10b are inserted through one terminal of torc L.10a
Wt: 202.3g (total for L.10a and L.10b)

L.10a: Gold/silver alloy torc
MSCC: (6C)2T+4Q
BM: 1991,0407.28; Site code: SN/OF
Gold/silver alloy multi-strand torc with torus terminals and Stage II neck-ring formed from six wires coiled together (see **Fig. 21.25**). Two of the wires (equally spaced between the other four) are twisted, and the others are squarish in section. One strand is broken, with a short length missing. The cast torus terminals have small central eyes and broad collars with a rounded edge. They seem to have been hollow castings. There are some small holes in one terminal and a larger one (possibly with core visible inside) in the other. There is very faint, heavily worn decoration on the terminals, incorporating shapes with hatched 'basket-weave' backgrounds. There was originally a triangular panel of similar ornament on the outside of each collar, now very faint. See Chapter 21 for a full discussion of decoration.
D(ext): 190.0mm; D(nr): 12.4mm; D(wire): 2.0mm; D(term): 22.5mm

L.10b: Gold/silver alloy torc/wire
MSCC: (?2P)T
BM: 1991,0407.28; Site code: SN/OG
Two lengths of gold/silver alloy twisted wire, each broken at both ends, plied loosely together.
D(wire): 2.2mm; L: 40.2mm

L.11: Gold/silver alloy torc (Pl. 14.55)
MSCC: (8CZ(2P))R
BM: 1991,0407.29; Site code: SN/OH
Gold/silver alloy multi-strand torc with buffer terminals and Stage III neck-ring (see **Fig. 21.19**). The cable is formed

L.7

L.8

L.9

L.10a-b

L.10a

Plate 14.54

from eight ropes coiled Z-twist around a hollow core, each made up of two circular-section wires plied together. Originally in two fragments, now re-joined. Several neck-ring rope strands are broken over a length of about 25mm. The slightly flared buffer terminals have rounded edges with pronounced, raised cordons around the front faces and where they meet the neck-rings. The flat undecorated faces are deeply recessed. The edges of the terminals are decorated on the front in very high relief (rising to a maximum of about 2.5mm above the surface) with a three-part design: a central lobe and dot set between two swags with semi-circular terminals. The orientation of the lobe and dot motif differs from one terminal to the other. See Chapter 21 for a full discussion of decoration.
Wt: 282.4g; D(ext): 188.0mm; D(nr): 12.8mm; D(rope): 3.9mm; D(wire): 1.5mm; D(term): 23.9mm

L.12: Gold/silver alloy torc (Pl. 14.55)
MSCC: (8C(2P))R
BM: 1991,0407.30; Site code: SN/OW
Near-complete gold/silver alloy multi-strand torc with one remaining buffer terminal and Stage III neck-ring (see **Fig. 21.20**). The break at the point of the missing terminal is very clean. The cable is formed from eight ropes coiled around a hollow core, each made up of two circular-section wires plied together. The break is very clean. The remaining terminal has rounded edges with raised cordons around the front face and where it meets the neck-ring. It is decorated around the outside edge with a relief zig-zag design created from opposing leaf motifs. The fin motifs created in the negative space are textured with stippled hatching. The terminal face has a raised outer rim, and a raised central button with a slight depression in the centre. See Chapter 21 for a full discussion of decoration.
Wt: 269.6g; D(ext): 191.0mm; D(nr): 13.9mm; D(rope): 4.0mm; D(wire): 1.6mm; D(term): 17.6mm

L.13: Gold/silver alloy torc (Pl. 14.55)
MSCC: (14C(2P(Z)))R
BM: 1991,0407.31; Site code: SN/OY
[Analysed: see Ch. 17]
Near-complete gold/silver alloy multi-strand torc with one remaining buffer terminal and Stage III neck-ring (see **Figs 17.15, 17.104a–c, 21.29**). The cable is formed from 14 ropes coiled around a hollow core, each made up of two circular-section wires plied together. Half of these are plied Z-twist, and the other half S-twist; the two types are alternated, giving an unusual texture to the neck-ring which resembles a braided rope. Four of the ropes have broken away from the surviving buffer terminal and at the other end of the neck-ring. The edge of the terminal is slightly convex, with a cordon where it meets the neck-ring. The edge is decorated with pointillé outlines alternating teardrop and triangular shapes. The flat face has chased/engraved decoration in the form of mirror-style motifs delineated by regular basketry hatching. See Chapter 21 for a full discussion of decoration.

Notes from scientific analysis (Nigel Meeks)
This is another very springy and flexible coiled multi-strand torc with a simple cast cap-end buffer terminal. One terminal is missing and the coiled neck-ring is showing signs of untwisting, and a little damage that probably occurred at the time the terminal was lost or removed. The buffer terminal has been decorated by engraving and chasing. What makes this torc unusual is the clever Stage III construction, where pairs of plied wires are assembled together with both S- and Z-twists. This gives a distinctive but subtle textural design to the torc, similar in appearance to the decorative filigree wires on tubular torc A.1.

Figure 14.35 The exposed square-section wire ends on L.13

While the overall appearance of this torc may look similar to that of torc L.17, the wires are very different. The coiled neck-ring comprises 14 ropes, each consisting of a pair of thin wires plied together. Each narrow wire is faceted. The facets are very uniform, and deep striations are also seen running along some wires and there are thin folds where the metal has smeared over due to hammering. The exposed outer wires are polished smooth from ancient use wear.

The ends of the wires are square in section where they are exposed at the damaged end (**Fig. 14.35**) and where they enter the terminal at the other end. This is clear proof that the original wires were made by hammering the stock alloy down to small dimension square-section wires and then the last stage of shaping was hammering along the square edges to produce the multiple facets that we commonly find on many of the Snettisham wires (see Ch. 17 for a full discussion of wire manufacture).

The buffer terminal appears to be cast, and is clearly fused to some of the neck-ring wires; there are file marks to clean up these joins. Other wires are loose in the terminal and have broken away.

The flat end of the buffer terminal has a beautifully engraved and chased design (**Figs 14.36**, **17.104a**). The main curved shapes have been defined using a sharp (metal) engraving tool that has left the characteristic V-shaped grooves of the tool's cutting edge as metal was cut away. The areas between have a recessed pattern of short lines created with a round-ended sharp chasing tool. Each line has tiny ridges left by the end of the tool showing the sequence of hammer blows used to move the tool through the metal. The ends of the tool marks show the splaying of the metal at the end of the last hammer stroke in those lines. It is probable

L.11

L.12

L.13

Plate 14.55

that metal was removed from the surface during the punching to create the recessed texture, as there is no evidence of raised ridges at the sides of the grooves from displaced metal or of polishing to remove them. So, the tool was essentially a combination chasing/engraving tool.

The outer edge of the terminal has a repeat geometrical pattern of teardrop and V-shapes formed by engraving the shape outlines and infilling with round punch-marks.
Wt: 237.4g; D(ext): 199.0mm; D(nr): 15.6mm; D(rope): 2.0mm; D(wire): 1.1mm; D(term): 23.3mm

L.14: Gold/silver alloy torc (Pl. 14.56)
MSCC: (6C(2P))R
BM: 1991,0407.32; Site code: SN/PA
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc with torus terminals and Stage III neck-ring. The cable is formed from six ropes coiled around a hollow core, each made up of two circular-section wires plied together. One of the simple cast torus terminals is now rather loose. The terminal heads seem to have been solid castings but the collars are hollow, each with a crude inner cordon. The collars are decorated with five raised, rounded dots on their outer edges, perhaps the heads of rivets mechanically affixing the terminals to the neck-ring (see Ch. 21 for discussion of decoration).

Notes from scientific analysis (Nigel Meeks)
This is a multi-strand torc, with Stage III neck-ring construction similar in overall appearance to e.g. L.18, but in this case with a completely different type of terminal: the torus terminals of L.14 are hollow castings attached to the prepared twisted wires of the neck-ring.
Six pairs of wires are coiled to form the neck-ring. They lie comfortably together, showing that the same number of turns was used for each plied pair. These circular-section wires show similar characteristics to other wires from the site, with uniform thickness, some evidence of linear faceting and smooth, polished outer exposed wires. But in this case there is a more prominent linear seam running along the wires. The seam runs along each wire with the twisting of the pairs. This seam must be a product of wire manufacture and possibly indicative of the use of a folded strip which has been made into round-section wire, albeit on a smaller scale than in the thick wire of torc S.31–9.
The wire neck-ring was prepared and assembled before the cast terminals were added. The terminals are simple. They are doughnut-shaped, hollow and have a wide neck that encapsulates the wire ends of the neck-ring. Unusually, compared to the other Snettisham torcs, there are five rivet heads on each terminal. Assuming these pass right into the terminals and are not simply a surface decoration, these would provide anchor points for the wires as a secure mechanical attachment.

Figure 14.37 shows a detail of the wires entering one terminal: there is no evidence of flow of metal onto the wires in this case. Other torcs, e.g. L.1, show metal flow. With this torc the terminals were therefore most likely cast separately and then added with the mechanical fixture. There is evidence of hammering to deform the neck edges to sit closer onto the wires.

Figure 14.36 Detail of buffer terminal on L.13

Wt: 429.9g; D(ext): 179.0mm; D(nr): 11.3mm; D(rope): 4.1mm; D(wire): 2.1mm; D(term): 29.3mm

L.15: Gold/silver alloy torc (Pl. 14.56)
MSCC: (8C)T
BM: 1991,0407.33; Site code: SN/PC
Fragment of gold/silver alloy multi-strand torc, comprising part of the neck-ring, broken and partly melted at one end, and a single surviving cage terminal. The terminal is formed from four confronted circular-section loops, each a continuation of one pair of the neck-ring wires, and also shows some evidence of melting. Stage II construction of eight twisted wires coiled around a hollow core.
Wt: 198.4g; D(nr): 11.0mm; D(wire): 2.6mm; D(term): 32.5mm; L: 112.0mm

L.16: Gold/silver alloy torc (Pl. 14.56)
MSCC: (6C(2PZ))R
BM: 1991,0407.34; Site code: SN/PE
[Analysed: see Ch. 17]
Fragment of gold/silver alloy multi-strand torc comprising one ring terminal and part of the Stage III neck-ring, cut at the other end (see **Figs 20.4b, 20.19a**; see Ch. 21 for discussion of decoration). The cable is formed from six ropes

Figure 14.37 Detail of join where wires meet terminal on torc L.14

L.14

L.15

L.16

Plate 14.56

coiled together, each made up of two circular-section wires plied together Z-twist. The ring terminal is a merged triple loop, the three elements joined by applied sheet gold (see below). Each of the three loops is decorated round the circumference with a line of dots, and the outer loop has similar decoration on the outside. The ring terminals are continuous with the neck-ring wires, each of the three rings extending into two of the ropes.

Notes from scientific analysis (Nigel Meeks)
The Stage III neck-ring of this torc is formed from six ropes, each comprising two wires. The ropes were made in pairs: a long pair of wires was bent at the centre point around a mandrel to form an open loop, with the extended pairs then twisted together into two two-ply units, with another loop terminal made at the far end. Three identical such units, each with exactly the same number of twists, were themselves coiled together very neatly to form the complex multiple 12-wire torc. The adjacent twists fall comfortably together making a very elegant, uniform pattern. The final part of construction was to cover each three-loop terminal with a thin sheet of gold alloy, fold it around the loops and into the valleys between them, and hammer the sheet to tightly enclose the wires and to mechanically secure the loops together (**Fig. 14.38**). The terminals were finished by punching a dot decoration around each of the covered loops. The individual wires are of a fairly uniform round section but facets are again seen along their length – most clearly seen in the protected areas deeper into the twists. The outer exposed wires have been polished smooth by wear from use in antiquity. The SEM wire detail images (**Fig. 20.4b**) show the outer smoothness, linear facets, linear striations and deep groove, a thin folded overlap from hammering and wear indentations. The torc was clearly worn in antiquity.

The neck-ring wires have been cut through deliberately in antiquity with a straight cut from a chisel (**Fig. 20.19a**).
Wt: 174.6g; D(nr): 6.8mm; D(wire): 2.0mm; D(term): 24.7mm; L: 136.4mm

L.17: Gold/silver alloy torc (Pl. 14.57)
MSCC: (8C)T
BM: 1991,0407.35; Site code: SN/PG
[Analysed: see Ch. 17]
Gold/silver alloy multi-strand torc, with buffer terminals and Stage II neck-ring of eight twisted wires coiled around a hollow core (four of the strands are broken at different points towards the back) (see **Fig. 20.5a–c** and Ch. 21). The cast buffer terminals have plain, flat faces and are decorated around the edge with a crimped cordon. Some of the neck-ring strands have merged when the terminal was cast on.

Notes from scientific analysis (Nigel Meeks)
This torc is a very springy and flexible coiled multi-strand torc with a simple cast cap-end buffer terminal.
Individual wires are made from square-section wire that is quite tightly twisted on itself and this gives the characteristic uniform spiral geometrical texture or pattern. As the wire is twisted, the square-section corners effectively become ridges while the flat-section sides become concave valleys between

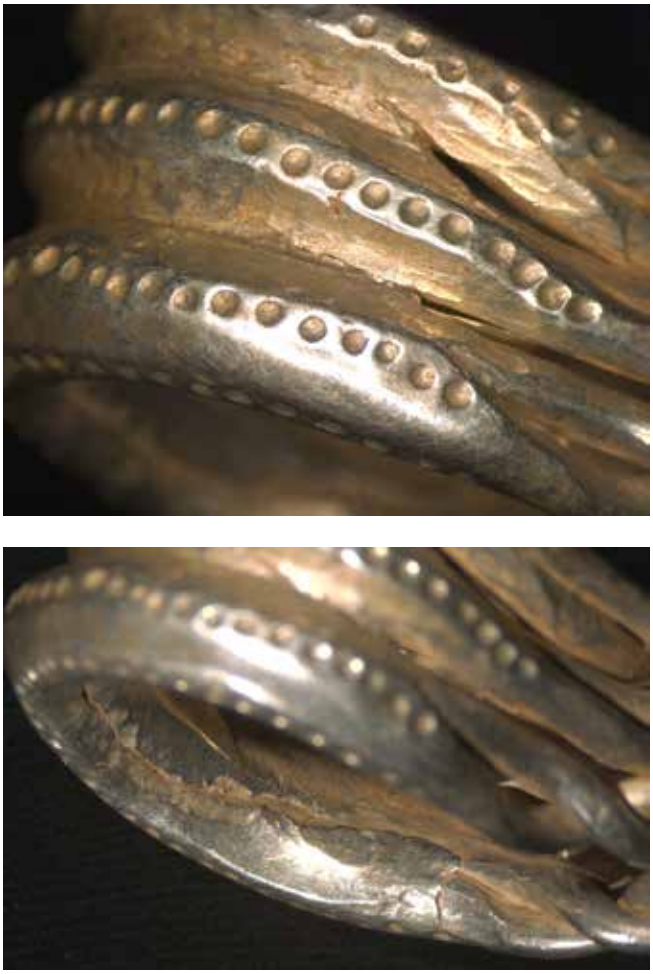


Figure 14.38 Detail of decoration and overlapping sheet on the terminals of L.16

the ridges. Eight such twisted wires were then coiled together, probably around a former to prevent them collapsing onto themselves during twisting and subsequent bending of the neck-ring into its shape (Chs 17, 19). Both of these mechanical operations were done before casting-on the terminals so that the wires could move relative to one another during bending. They were then permanently locked into the coiled and curved shape once the terminals were cast on.

The buffer terminals are plain on their flat ends but have a wavy cast-in pattern around the outer circumference, where they join the neck-ring. The assembled cap and wires are well fused and a little post-casting tooling was applied to clean up the terminal where the wires join at around 45 degrees.

Because the torc is so flexible there is a lot of wear between adjacent wires through extensive use in antiquity (see **Fig. 20.5a–c**), more than is seen on most torcs, yet overall the torc is in very good condition. This implies much careful wearing in antiquity, probably over some time to create the degree of wear. Some wires are broken but the majority are sound.
Wt: 216.0g; D(ext): 167.0mm; D(nr): 11.0mm; D(wire): 2.0mm; D(term): 20.1mm

L.18: Gold/silver alloy torc (Pl. 14.57)
MSCC: (4CZ(2P))R
BM: 1991,0407.36; Site code: SN/PJ
[Analysed: see Ch. 17]

L17

L.18

Plate 14.57

Gold/silver alloy multi-strand torc with Stage III neck-ring and double-ring terminals. The cable is formed of four ropes coiled together Z-twist, each made up of two circular-section wires plied together. The terminals are merged double rings with a wide (?soldered) ring between the two elements. The wide central ring is slightly concave and decorated with a central notched/crimped rib (see Ch. 21 for discussion of decoration). The outer rings are continuous with the neck-ring wires, each extending into two of the ropes.

Notes from scientific analysis (Nigel Meeks)
This torc shows similar construction to L.16, but with two rather than three components twisted together, giving eight wires in the finished torc neck-ring. The main difference in construction is that here there is a third loop inserted in the middle of each ring terminal as a spacer.

The loops each comprise two fused wires, from the original pair of round-section wires, formed into a single loop, probably hammered to mechanically fuse them together into one round-section loop – the seams between loop wires are seen in (**Fig. 14.39**). It is a possibility that some soldering was used to facilitate fusion of the loops together along with the third spacer loop as the complete joins are seamless and there is a fine stress corrosion crack at the join, typical of an ancient soldered joint. There are also some mechanical hammer marks inside of the joined loops. The pre-formed Stage II components with their fused loops would have been twisted together in the same manner as L.16, with the loops most likely used as 'handles' for twisting the neck-ring. In this case the identically sized Stage II components match precisely in their twisting to form an elegant, symmetrical pattern. The final step in their construction was to punch a dot decoration onto the centre-line of each ring terminal and then to engrave lines around punched decoration (**Fig. 14.41**). These lines overlap the dots and partly obscure them, giving the effect of a zig-zag.

The wires are highly polished on the outside, with use wear between wires where they rubbed together in use. Protected areas of the wires show linear facets (**Fig. 14.40**).
Wt: 537.2g; D(ext): 177.0mm; D(nr): 15.1mm; D(rope): 6.8mm; D(wire): 2.9mm; D(term): 34.3mm

L.19a–f: Composite group (interlinked) (Pl. 14.58)
BM: 1991,0407.37; Site code: SN/PL
[Analysed: see Ch. 17]
Torc L.19a has been heavily repaired using additional metal objects and components. Wire L.19b runs around the torc from terminal to terminal, wrapped around the neck-ring wires. Torc/bracelet L.19c is inserted through the terminals, acting as a clasp and support. Gold sheet or tubular torc fragment L.19d forms a 'collar' around the back where the wires of the neck-ring are broken. Strips L.19e are wrapped around one of the terminals as a repair to fix it to the neck-ring, and strip L.19f is used for a repair at the back of the torc neck-ring, alongside L.19d.
L.19b is perhaps the latest repair to torc L.19a. One of the wires of L.19b starts within terminal B where it is hooked over the strands of torc/bracelet L.19c, then wraps over the strips of L.19e, round the strands of the torc neck-ring, over the gold sheet at the back of the neck-ring (L.19d) and hooks under a piece of the same or very similar twisted strand. This second piece of L.19b is wrapped three times round the torc strands (and over the strip L.19f which repairs the back of the neck-ring). One end disappears amongst the strands and the other passes over gold sheet L.19d and ends amongst the strands on the other side.
Torc/bracelet fragment L.19c links the terminals of L.19, its own terminal passing through the perforation in terminal A

Figure 14.39 Detail showing fused terminals on L.18

Figure 14.40 Detail showing faceted wires on L.18

Figure 14.41 Detail showing chased and punched terminal decoration on L.18

L.19a-f

Plate 14.58

and its broken end stopping within terminal B.
Sheet gold 'collar' L.19d around the back of the neck-ring of torc L.19a covers strip L.19f and is covered by wire L.19b, suggesting a multi-phase or stage repair.
One strip of L.19e starts within the central hole of terminal B of torc L.19a and the other passes through this hole. Both are wrapped round the neck-ring wires adjoining the terminal and extend for about 25mm up the neck-ring.
Strip(s) L.19f are wrapped round the back of the neck-ring of torc L.19a at either side of the sheet 'collar' L.19d. One strip extends to 28mm from one end of the collar and the other stops on line with the other end of the collar. It may well be that they are linked under the collar.
Wt: 766.9g (total for L.19a–f)

L.19a: Gold/silver alloy torc
MSCC: (4C(4C))T
Gold/silver alloy multi-strand torc with sheet gold torus terminals. Sometimes known as 'The Grotesque Torc', or 'The Marriage Torc' (see **Figs 17.94a–b, 17.98–9, 17.100a–b, 17.101, 20.15–16, 21.30**). Complete, but much repaired in antiquity. The Stage III neck-ring is formed from four coiled ropes, each of which is made up of four coiled strands of twisted wire. The sheet gold terminals are shaped to grasp the ends of the four coiled cables (the sockets stippled like some of the decoration on the terminals). The terminals are decorated in high relief in the Plastic Style, including elements of zoomorphic decoration. There are several holes in the end of terminal A, and the neck-ring is completely broken at the back, where is has been repaired. See Chapter 17 for information on construction, and Chapter 21 for a full discussion of decoration.

Notes from scientific analysis (Nigel Meeks)
This torc is complex and has massive-looking terminals although it still has the overall main construction features of a multi-strand wire neck-ring. In this case the terminals are made from deeply embossed thin sheet gold, with better defined decoration than the sheet terminal F.72. The torc was extensively repaired in antiquity at a break in the middle of the neck-ring which is clearly visible in the X-radiograph (see **Fig. 20.16a–b**).

The neck-ring comprises four coiled ropes, each formed from multiple twisted square-section wire strands, giving a very even texture. The ropes are themselves loosely twisted together, with about three turns to form the completed neck-ring. The wire ends are soldered into the hollow sheet terminals. This combination makes a rather loose, flexible neck-ring compared to other more tightly twisted or coiled multi-strand examples.

The ends of all of the complete wire ropes enter just into the neck of the hollow terminals (see **Figs 17.98b, 17.99a–b, 17.101**, **20.16a–b**) and the terminal sheet has been pressed onto and around the wires which mechanically encloses them to hold them firmly. This reduces the otherwise open spaces between the terminal and wires. There is evidence of solder flow and heating on the wires as they enter the terminals. Unlike the cast terminal/wire interface on other torcs (e.g. L.21a) that are fairly solid and substantial, these have a more open structure as it was not possible to fill the spaces with solder. The overall mass of the terminals is actually minimised by the construction methods and produced a lighter weight, but still substantial, large torc.

The terminals have decorative designs and large deep features produced by hammering and chasing the sheet gold possibly in combination with repoussé, via the open neck (see **Fig. 17.100a–b**). Within some of the fields between the deep designs the surface has been textured in a punched dot pattern using a single round-ended punch (see **Fig. 17.100b**). The outlines of these areas have been defined by chasing lines around the perimeter. This is similar to terminal F.72.

The X-radiograph (see **Fig. 20.16a–b**) clearly shows that the neck-ring had been severed right through the middle region in antiquity. Possibly this was due to fatigue fracture with constant flexing and opening of the torc to fit around the neck. The repair must be ancient and is simply a collar of sheet gold (L.19d, possibly a tubular torc fragment) that has been wrapped around the broken wires and forming a double layer. There is no evidence of solder or any kind of more permanent repair either joining the wires together or joining the tubular sheet to the wires. The strips of silvery sheet and twisted single wires in the area (L.19b, e and f) might have some mechanical retaining purpose for the tubular sheet repair, but it is not a very substantial repair on its own that would allow further wearing of the torc. However, the broken torc or bracelet looping through the terminals (L.19c) may have been a securing 'clasp' to allow its use after the repair.

The surface of the sheet repair (L.19d) has been textured with fine dot-punched decoration similar to the terminal but done with a different punch.
D(ext): 210.0mm; D(nr): 19.0mm; D(rope): 11.4mm; D(wire): 1.7mm; D(term): 67.0mm

L.19b: Gold/silver alloy wire
Two lengths of gold/silver alloy twisted wire, of thicker gauge than the neck-ring wires of torc L.19a.
D(wire): 2.3mm

L.19c: Gold/silver alloy torc/bracelet
MSCC: (2P)R
Fragment of gold/silver alloy multi-strand torc or bracelet comprising one loop terminal (continuous with the neck-ring/body wires) and a length of neck-ring/body, broken at the other end. Stage II construction of two circular-section wires plied together.
D(ext): 78.0mm; D(nr): 4.8mm; D(wire): 2.5mm; D(term): 10.0mm

L.19d: Gold/silver alloy torc/sheet
?TUBULAR (?TYPE 4/5/6)
A length of sheet gold/silver alloy tube with no apparent join, possibly once part of a tubular torc. At one end there seem to be two very thin overlapping layers.
L: 55.0mm

L.19e: Gold/silver alloy strip
Two lengths of gold/silver alloy strip, with flat, rectangular cross-section.
W: 3.0mm; T: 0.2mm

L.20a-b

L.21a-b

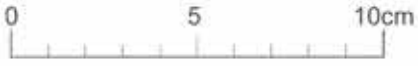


Plate 14.59

L.19f: Gold/silver alloy strip
Length(s) of gold/silver alloy strip, with flat, rectangular cross-section.
W: 3.0mm; T: 0.2mm

L.20a–b: Composite group (interlinked) (Pl. 14.59)
BM: 1991,0407.38; Site code: SN/PN
Broken torc L.20a has been repaired using twisted wires L.20b. One strand that starts in a hole in the side of the collar of terminal A is twisted once round all three coiled ropes and is then loose, terminating in a circular-section (not twisted) spiral about 5mm in diameter, like two coils of a brooch spring. Terminal B has been repaired with two lengths of twisted strand, one wrapped round one of the coiled ropes and hooked through a hole in the collar and the other passing through the other coiled rope. Even with these repairs, the torc is so broken that it is hard to imagine how it could have been worn.
Wt: 353.0g (total for L.20a–b)

L.20a: Gold/silver alloy torc
MSCC: (6C([2Px3]+[4Cx3]))R
Gold/silver alloy multi-strand torc in two halves (broken in antiquity), with torus terminals and Stage III neck-ring, now heavily damaged but probably originally comprising six ropes of two types coiled together, arranged alternately (see **Fig. 21.26**). The three more substantial ropes are formed from four wires coiled around a hollow core; each of the three smaller ropes has two strands twisted together. The ends of all six ropes survive in terminal A (the longest of the smaller ropes only 5mm long), but for the rest of the torc only the larger ropes now survive. The hollow, damaged torus terminals are probably of sheet construction. Each carries a La Tène-style incised design of triangular and other shapes infilled with random 'basket-weave' hatching and the occasional ring with dots, most of the shapes bordered by external lines of dots. The decoration is worn, especially on the ends. Decoration on the collars ends with a dotted cordon, beyond which the metal sheet is shaped to grasp each of the cables. The collar of terminal A is badly broken on the outside, with a hole about 20mm long and some 8mm wide, and the head has a large dent and a crack. Terminal B also has a hole through the collar (though not as big as that in A) and the end of the head is worn and dented, but not broken. The artefact looks much used and has been repaired in antiquity with a twisted piece of gold/silver alloy wire (L.20b) which is affixed to the base of each terminal. Both terminals also have small soldered or part-melted sheet fragments near the collar. See Chapter 21 for a full discussion of decoration.
D(ext): (approx.) 175.0mm; D(nr): 20.0mm; D(rope): 8.0 mm (max.); D(wire): 1.4mm; D(term): 49.5mm

L.20b: Gold/silver alloy wire
Three lengths of gold/silver alloy twisted wire used to repair torc L.20a.
D(wire): 1.8mm

L.21a–b: Composite group (interlinked) (Pl. 14.59)
BM: 1991,0407.39; Site code: SN/PO
[Analysed: see Ch. 17]
Strip L.21b is twisted around one of the terminals of torc L.21a, as a repair reattaching it to the neck-ring (**Fig. 14.42**).
Wt: 917.8g (total for L.21a–b)

L.21a: Gold/silver alloy torc
MSCC: (8C(2P(2P)))R
Gold/silver alloy multi-strand torc with Stage IV neck-ring and cast torus terminals (see **Figs 17.63–5, 17.68a–b, 20.6a–b, 20.11, 21.15**, **23.8**). The neck-ring consists of eight cables coiled loosely together, each comprising two ropes plied together, each rope formed from two plied circular-section wires. One of the cables has broken near the terminal which is still securely attached. The other terminal has broken away from some (or all) of its neck-ring wires and has been crudely secured by a length of gold/silver alloy strip (L.21b). The terminals are flawed hollow castings and in parts the collar of one terminal does not completely cover the strands. The same terminal has three small holes and a large hole on the inside of the ring that are unlikely to be the result of damage and are probably casting flaws. Some small holes in more visible areas have very neat patches. The other (detached) terminal has a slightly smaller hole in the eye and a much larger hole at the end (up to 20mm long and 14mm wide), most likely a casting flaw. The collars are wider on the outside, and each has a plain cordon where it meets the head and a crimped cordon where it meets the neck-ring. There is high-relief ornament of lobes and triangular shapes on the collar and the head. See Chapter 17 for information on construction, and Chapter 21 for a full discussion of decoration.

Notes from scientific analysis (Nigel Meeks)
This is a multi-strand torc with Stage IV neck-ring construction, with the hollow terminals cast onto the prepared twisted wires of the neck-ring. It is similar to torc L.1. The torc has an entwined strip of rectangular-section wire (L.21b) wound round and through one terminal which serves no mechanical purpose, though it may have been intended to reinforce the join between neck-ring and terminal. The torus terminals were cast onto the neck-ring, and dribbling can be seen around the wires (see **Fig. 17.65**). There is a large cold-shut at the end of one terminal (**Figs 14.43, 17.68a–b**).

The overall appearance of the neck-ring wires is of a very symmetrical pattern, with the twists well aligned. The pairs of wires which form the ropes are tightly twisted together, as are the ropes and cables themselves, unlike the more loosely twisted torc L.1. Again, the wire characteristics make the neck-ring strong but flexible.

The outer regions of the wires are smooth and polished from wear (see **Fig. 20.6a–b**). The protected regions show many linear facets and a single groove and fine striations along the wires. Extreme mechanical wear is seen between many wires due to flexing and rubbing during extensive use in antiquity. A few wires are broken, particularly where they enter the terminals. In places the linear grooves are very deep and wide showing that the wire must have been originally folded from a strip. One unusual feature was noted on the surface of the worn outer wires – there is a

Figure 14.42 Detail showing looping of strip L.21b around the terminal of torc L.21a

Figure 14.43 Detail showing terminal of L.21a with large cold-shut

colour difference between the worn centre areas of the curved wires and the surrounding surfaces. The worn centre is copper coloured and the outer edges more silver. This implies the surface layer is enriched in silver (depleted in copper), with the coppery-coloured core being exposed where this surface has worn away. This is typical of the silver-copper alloys that were investigated by sampling fragmentary pieces from Hoard F (Ch. 17), in which copper was found to be leached from the surface of these alloys by acidic pickling during manufacture. Therefore, by implication, this torc started as a silver/copper-rich alloy and the manufacturing process produced a more silvery colour.
D(ext): 199.0mm; D(nr): 21.1mm; D(cable): 5.9mm; D(rope): 4.0mm; D(wire): 2.0mm; D(term): 53.0mm

L.21b: Gold/silver alloy strip
Length of gold/silver alloy strip with flat rectangular cross-section, coiled/wrapped around the detached terminal of L.21a.
W: 1.0mm; T: 0.2mm

Hoard M

Recovered during detecting by Charles Hodder in 1991. [Radiocarbon dated: see **Table 5.2**]

M.1: Silver-copper alloy lump (Pl. 14.60)
BM: 1992,1203.7
Large amorphous silver-copper alloy lump with charcoal inclusions.
Wt: 4482.0g; L: 245.0mm

M.2: Silver-copper alloy lump (Pl. 14.60)
BM: 1992,1203.8
Amorphous silver-copper alloy lump with charcoal inclusions.
Wt: 978.0g; L: 165.0mm

M.3: Silver-copper alloy lump (Pl. 14.60)
BM: 1992,1203.9
Amorphous silver-copper alloy lump with charcoal inclusions.
Wt: 767.0g; L: 123.0mm

M.4: Silver-copper alloy lump (Pl. 14.60)
BM: 1992,1203.10
Amorphous silver-copper alloy lump with charcoal inclusions.
Wt: 367.0g; L: 93.0mm

M.1

M.2

M.3

M.4

M.5

M.6

0 5 10cm

Plate 14.60

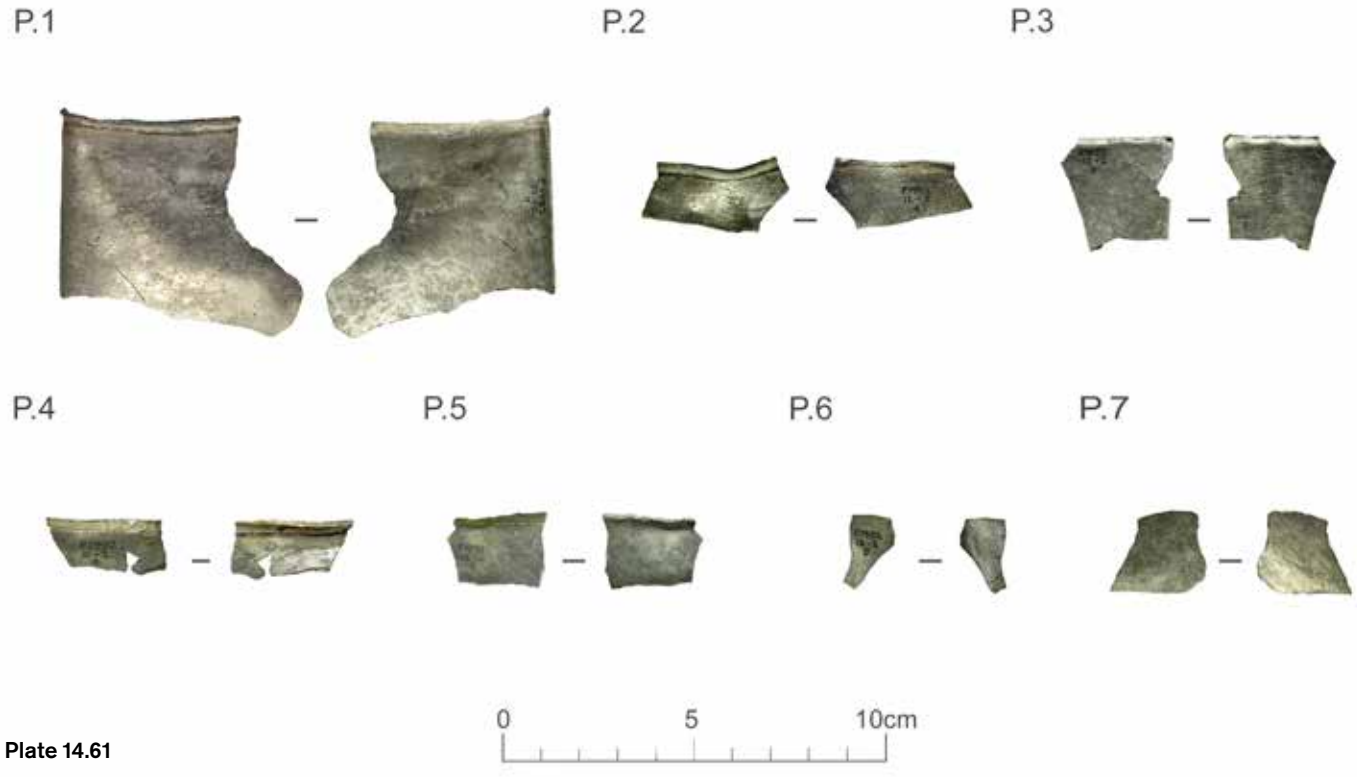


Plate 14.61

M.5: Silver-copper alloy lump (Pl. 14.60)
BM: 1992,1203.11
Three small amorphous silver-copper alloy lumps.
Wt: 8.0g; L: 20.5mm

M.6: Copper alloy lump (Pl. 14.60)
BM: 1991,0409.1
Amorphous copper alloy lump, possibly casting waste or a melted object.
Wt: 90.2g; L: 77.2mm; T: 18.0mm

Hoard P

Hoard P, composed predominantly of 1st-century AD local East Anglian silver coinage, was removed from the site by illicit metal detectorists between the 1990 and 1991 excavation seasons (Chs 2, 4, 12; see Ch. 15 for attempts to reconstruct the coin assemblage).

The hoard was reportedly found contained within a silver bowl. Seven non-joining fragments of silver vessel were recovered in or around the area thought to have produced the coin hoard during metal-detector surveys carried out as part of the 1991 (ST code) and 1992 (SM code) excavations. These finds are presented here as P.1–7.

P.1–7: Fragments of silver alloy vessel/bowl (Pl. 14.61)
Broken (non-joining) fragments of a silver alloy vessel, probably a bowl. Most likely the container which held the lost silver coin hoard, P. Simple raised copper alloy bowls are well known from Iron Age contexts, and a similar, although likely smaller, silver bowl was found in a mid-1st-century AD context at Hallaton, Leics. (Score 2011, 78, no. 30).

P.1: BM 1992,1202.7; Site code: ST/GT
Rim fragment from vessel. Body made from thin silver alloy sheet, with slightly thickened everted rim.
Wt: 23.0g; L: 81.3mm; T: 0.5mm (edge); T: 0.6mm (rim)

P.2: BM 1992,1202.4; Site code: ST/GQ
Rim fragment from vessel. Body made from thin silver alloy sheet, with slightly thickened everted rim.
Wt: 6.5g; L: 38.1mm; W: 18.1mm; T: 1.5mm (rim)

P.3: BM 1992,1202.9; Site code: ST/GW
Rim fragment from vessel. Body made from thin silver alloy sheet, with slightly thickened everted rim.
Wt: 5.2g; L: 36.8mm; W: 36.3mm; T: 0.4mm (edge); T: 0.7mm (rim)

P.4: BM 1992,1202.8; Site code: ST/GV
Rim fragment from vessel. Body made from thin silver alloy sheet, with slightly thickened everted rim. Now in two pieces and originally reconstructed from three pieces.
Wt: 4.9g; L: 31.0mm; W: 14.5mm; T: 0.9mm (edge); T: 2.0mm (rim)

P.5: BM 1992,1202.6; Site code: ST/GS
Rim fragment from vessel. Body made from thin silver alloy sheet, with slightly thickened everted rim.
Wt: 3.3g; L: 29.1mm; W: 22.0mm; T: 0.7mm (rim)

P.6: BM 1992,1202.5; Site code: ST/GQ
Fragment from vessel, body made from thin silver alloy sheet.
Wt: 0.4g; L: 20.8mm; W: 12.4mm; T: 0.2mm

P.7: BM 1992,0210.2; Site code: SM/AC
Context details: Metal-detected stray find March 1992.
Fragment from vessel, body made from thin silver alloy sheet.
Wt: 2.4g; L: 30.0mm; T: 0.8mm

Non-hoard metalwork finds

This catalogue covers non-hoard metalwork finds from across the site, and is divided into a number of sections:
Phase 2:

- S.1–S.10: Bronze Age to Earlier Iron Age (Phase 2) finds. See also Chapter 7 for further discussion of this material

Phases 3–4:
This section includes objects such as torcs and rings which may represent dispersed hoard material, alongside otherwise undiagnostic objects and fragments (such as ingots and sheet fragments) which find parallels in the hoards and thus may date to these phases of activity.

- S.11–S.83: Torcs, bracelets and related components contemporary with the hoards
    - S.11–S.76: Gold/silver alloy
    - S.77–S.83: Copper alloy
- S.84–S.100: Large/small rings
    - S.84–S.98: Gold/silver alloy
    - S.99–S.100: Copper alloy
- S.101–S.111: Lump and triangular ingots
    - S.101–S.103: Gold/silver alloy
    - S.104–S.111: Copper alloy
- S.112–S.122: Linear ingots
    - S.112–S.116: Gold/silver alloy
    - S.117–S.122: Copper alloy
- S.123–S.124: Unidentified objects: Possible ingots (copper alloy)
- S.125–S.129: Rod and wire
    - S.125–S.126: Gold/silver alloy
    - S.127–S.129: Copper alloy
- S.130–S.131: Metalworking waste (copper alloy casting sprues)
- S.132–S.140: Amorphous lumps: worked or incorporating part-melted objects and fused additions
    - S.132–S.138: Gold/silver alloy
    - S.139–S.140: Copper alloy
- S.141–S.234: Amorphous, unworked metal lumps (tabulated, not illustrated)
    - S.141–S.178: Gold/silver alloy
    - S.179–S.233: Copper alloys and lead alloys
    - S.234: Iron
- S.235–S.241: Possible beaded torc and bracelet fragments (copper alloy and iron)
- S.242–S.245: Brooches (silver and copper alloys) *(by Sophia Adams)*
- S.246–S.252: Other personal ornaments and fasteners (copper alloy)
- S.253–S.266: Fittings, mounts and strap fittings (copper alloy and iron)
- S.267–S.275: Rivets and rivet heads (copper alloy)
- S.276–S.286: Binding strips (copper alloy)
- S.287–S.307: Strip
    - S.287–S.306: Copper alloy
    - S.307: Iron
- S.308–S.339: Sheet fragments with original edges or other distinguishing features (copper alloy)
- S.340–S.351: Sheet fragments with no original edges or diagnostic features (copper alloy) (tabulated, not illustrated)
- S.352–S.354: Tools and implements (iron and copper alloy)
- S.355–S.359: Mail armour fragments and fitting (iron and copper alloy)
- S.360–S.365: Unidentified object fragments (copper alloy)

Almost all the finds dealt with in this section of the catalogue are stray finds recovered during agricultural activity or metal-detecting surveys at the site. There are three main phases of recovery (see also Chs 2 and 4):

- Torcs found during ploughing in the 1960s–70s (S.16–S.18 and S.31). These are held by NCM.
- Objects found in 1989–92 during Hodder's initial metal-detecting surveys of the 'gold field' and metal-detecting carried out as part of the 1990s excavation seasons. The majority of these are held by the BM, though a small group of 1989 finds are in NCM.
- Objects found during metal-detecting survey of the wooded area to the west of the 'gold field' in 2003–9. These are held by NCM.

The iron core from a tubular torc, S.12, was recovered in or shortly before 1999 (when it entered the collections of NCM), though no further information on the find circumstances could be found.

Only four objects, listed in **Table 14.1**, were discovered during archaeological excavation rather than detector survey. All were recovered during the 1992 season of the British Museum excavations. None of these objects, nor their contexts, can be closely dated. Brooch fragment S.244, identified by Sophia Adams, may date to 400–300 BC, but a post-150 BC date is also possible (see catalogue entry below). The knife, S.353, resembles Manning (1985) Type 1b, a Roman form most common in the 1st century AD.

This section of the catalogue combines the finds from across BM and NCM collections, allowing the identification of at least two fragmentary torcs which are split across the two museums (S.23–9 and S.31–9). In each catalogue entry, the museum and date of recovery are indicated, along with any details recorded about the method of discovery and location of the findspot. Objects for which the findspot was accurately recorded are plotted in **Figure 14.44**. At the time of writing, the 2003–9 material at NCM does not yet have full NCM registration numbers. In this case, each object was assigned a yellow raffle ticket during the study undertaken for this catalogue, based on the order of an original listing by John Davies and Amy Seaman. These raffle ticket numbers are given in the catalogue entries and also in the full concordance in Appendix 3.

In most cases, it is not possible to draw direct connections between these stray finds and the hoard material, though tubular torc core S.12 may be related to Hoard A, which has produced the only other comparable torcs from Snettisham. The upper part of Hoard J had been heavily truncated by ploughing, and it seems likely that S.20 is part of the same torc as J.2, and S.54 may be part of torc J.1. Similarly, many of the other fragmentary torcs, bracelets and rings (S.11–S.100) may also be scattered hoard material, in particular relating to the fragmentary Hoard F, which had clearly had its upper layers disturbed by ploughing. S.11a–b in particular are strong candidates for dispersed Hoard F material. However, no joins or direct connections have been identified at this time. The findspots of these objects, where

Cat. no.	Object	Trench	Feature	Feature Phase	Context details
S.244	Copper alloy bow brooch fragment	6	Enclosure ditch: SA6/2, section C	4	Layer 1, i.e. uppermost layer of ditch, cannot be considered a sealed context due to agricultural disturbance
S.246	Copper alloy strip, possibly pin from brooch or buckle	6	Natural feature (gully): SA6/7	N/A	Likely residual in a natural feature
S.286	Copper alloy U-shaped binding strip	7	Ditch: SA7/5, Section D	?6	Likely residual in a post-medieval feature
S.353	Iron knife	5	Hollow/Pit: SA5/3	?	From top 2–3cm of pit, i.e. cannot be considered a sealed context due to potential agricultural disturbance

Table 14.1 Non-hoard finds from archaeological excavation

recorded, are dispersed around the field rather than in a concentration which might suggest an additional hoard or hoards, though this cannot be ruled out.

Whilst the majority of the stray finds (torcs, rings, ingots, wire, S.11–S.129) have parallels in the torc hoards, suggesting they were part of the same phase and type of activity, other find types are present only in the dispersed material, especially that from the wooded area to the west of the site, surveyed in 2003–9. This includes metalworking debris in the form of casting sprues (S.130–S.131), and a large quantity of amorphous lumps of both gold/silver alloys (S.141–S.178) and copper and lead alloys (S.179–S.233) which may represent debris from metalworking or destructive processes such as the melting down of objects. Some of this material could be associated with later phases of activity at the site (Phases 4 and 5), but the presence of precious metal lumps suggests a likely association with the Phase 3 hoard activity. This argument is further strengthened by the fact that a small number of these lumps contain part-melted wire or gold sheet fragments likely from torcs (S.132–S.140).

Other find types are those that might be expected on an Iron Age and Roman site of this scale, including a small number of objects of personal adornment such as brooches, rings, buttons/fasteners (S.242–S.252), and beads that may be associated with one or more beaded torcs/bracelets (S.235–S.241), although this material is too corroded and fragmentary for secure identification. Various fittings and mounts (S.253–S.266) include a pair of zoomorphic copper alloy terminals, perhaps from drinking horns (S.253–4, found some way to the east, in the area of Trench 15), a terret (S.256–7) and a possible linch-pin terminal (S.255). There are two iron knives (S.352–S.353, not certainly ancient), and a small pair of copper alloy tweezers that are likewise hard to date closely (S.354).

Some of the stray finds clearly derive from larger objects, perhaps including metal vessels or vessels such as tankards with metal fittings. These include narrow strips of copper alloy sheet, some with rivet holes or extant rivets (S.287–S.307), a large number of copper alloy sheet fragments (S.308–S.351), nine copper alloy rivets and rivet heads (S.267–S.275), and fragments of U-shaped copper alloy binding strips (S.276–S.286). Some of this fragmentary material may also have derived from one or more shields. A corner binding from a hide-shaped shield was included in Hoard B/C (B/C.89) and the stray finds include another similar terminal (S.276).

Another set of material with martial associations amongst the stray finds is a small group of fragments derived from iron mail armour, or 'chain-mail' (S.356–9), likely dating from the Late Iron Age or Early Roman period. All the iron fragments come from the wooded area to the west of the 'gold field', and were recovered during the 2003–9 survey. Pre-conquest finds of mail armour are unusual in Britain. Perhaps the earliest example comes from a Middle Iron Age grave at Kirkburn in East Yorkshire (Stead 1991b, 224, figs 45, 81 and 127). There are more finds from Late Iron Age sites, including fragments of chain-mail from funerary contexts in 'chiefly' burials at Lexden (Essex, *c.* 20–15 BC, Laver 1927, 248; Foster 1986, 82–8), Folly Lane (St Albans/Verulamium, Herts, *c.* AD 50, Foster 1986; Niblett 1992, 923), and Baldock (Herts, late 1st century BC, Burleigh 1982). Other comparable mail armour finds come from the Stanwick Hoard (MacGregor 1962), the Late Iron Age/Early Roman Temple at Hayling Island (King, Soffe and Downey 1979, 7), and a placed deposit at the Roman temple at Ashwell (Jackson and Burleigh 2018, BM 2011,8012.40–3). The Folly Lane find was a complete tunic, whilst the mail armour from Baldock, Ashwell, and Stanwick had been deliberately fragmented in a manner seemingly similar to that seen at Snettisham. Over 140 fragments were present at Ashwell, and around 30 at Baldock, compared to just four at Snettisham. In some of these contexts, especially the high-status burials, the mail fragments may represent pre-conquest imports of Roman *lorica hamata* mail armour, perhaps as diplomatic gifts to indigenous elites. Whilst at present the Snettisham mail armour cannot be closely dated, the ring size of around 5mm is consistent with a date from the 3rd century BC to 3rd century AD (Wijnhoven 2022, 261–4).

S.355 (findspot not recorded) may represent a mail armour hook. These S-shaped 'dolphin' fittings were used in pairs to secure the shoulder flaps of mail armour from around the 3rd century BC to 1st century AD (Wijnhoven pers. comm.). Similar (although more elaborate) fittings have been found elsewhere in Britain, including in the Polden Hill Hoard (Brailsford 1975; BM 1846,0322.110–11), the Stanwick Hoard (BM 1847,0208.63, 2013,8037.1, 2018,8017.1), and at Hod Hill (1892,0901.543), Brough (BM 1874,0328.74), Camerton (Bristol Museum F684), Longthorpe (Bishop and Coulston 1993, 86), and Tooley Street (Southwark, BM 1905,1106.6) (see also Spratling 1972, nos 245–50).

Further research on the mail armour from Snettisham may uncover more details, or refine the dating, but this material certainly does not appear out of place at a Later

Figure 14.44 Distribution of stray finds

Iron Age and Early Roman temple site. In the absence of any other evidence, its presence alone is not enough to suggest a burial, but this remains a possibility.

Phase 2 Metalwork: Bronze Age and Earlier Iron Age finds

S.1: Copper alloy socketed axe fragment (Pl. 14.62)

BM: 1990,1101.42; Site code: SN/JZ
Findspot: Area 21
Context details: Metal-detected stray find from 1990 excavation.
Heavily worn and broken Late Bronze Age socketed axe fragment, comprising just the blade and part of the tip. Too worn for close identification.
Wt: 39.4g; L: 43.6mm; W: 35mm

S.2: Copper alloy sword chape (Pl. 14.62)

BM: 1991,0409.27; Site code: ST
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Broken scabbard chape of simple semi-circular form, with the convex end defined by a bead. Flat on reverse, broken at the mouth. Probably the end of a Late Bronze Age bag-shaped dagger scabbard chape. cf. O'Connor (1980, 190–1, ref. 161), dating to *c.* 900–800 BC.
Wt: 6.3g; W: 30mm; T: 9.6mm

S.3: Copper alloy razor (Pl. 14.62)

NCM: yellow ticket no. 3
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Terminal fragment from an Early Iron Age Hallstatt period razor. Moulded collar separates the perforated terminal from the body. Both arms are broken, leaving a V-shape fragment. Decorated on one side with three solid lines radiating away from the collar. This appears to be a Wiesloch-type razor, which can be assigned to the Llyn Fawr metalwork phase (*c.* 800–600 BC).

These razors are most common in Belgium and Britain (Jockenhövel 1980, 137–8, fig. 55). The closest parallel in Britain comes from the multi-period Salisbury Hoard (BM 2001,0702.7; O'Connor 2007) where it was deposited alongside Late Iron Age material (Stead 1998).
Wt: 1.8g; L: 20mm; W: 10mm; T: 2.5mm

S.4: Copper alloy arrowhead (Pl. 14.62)

NCM: yellow ticket no. 251
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.

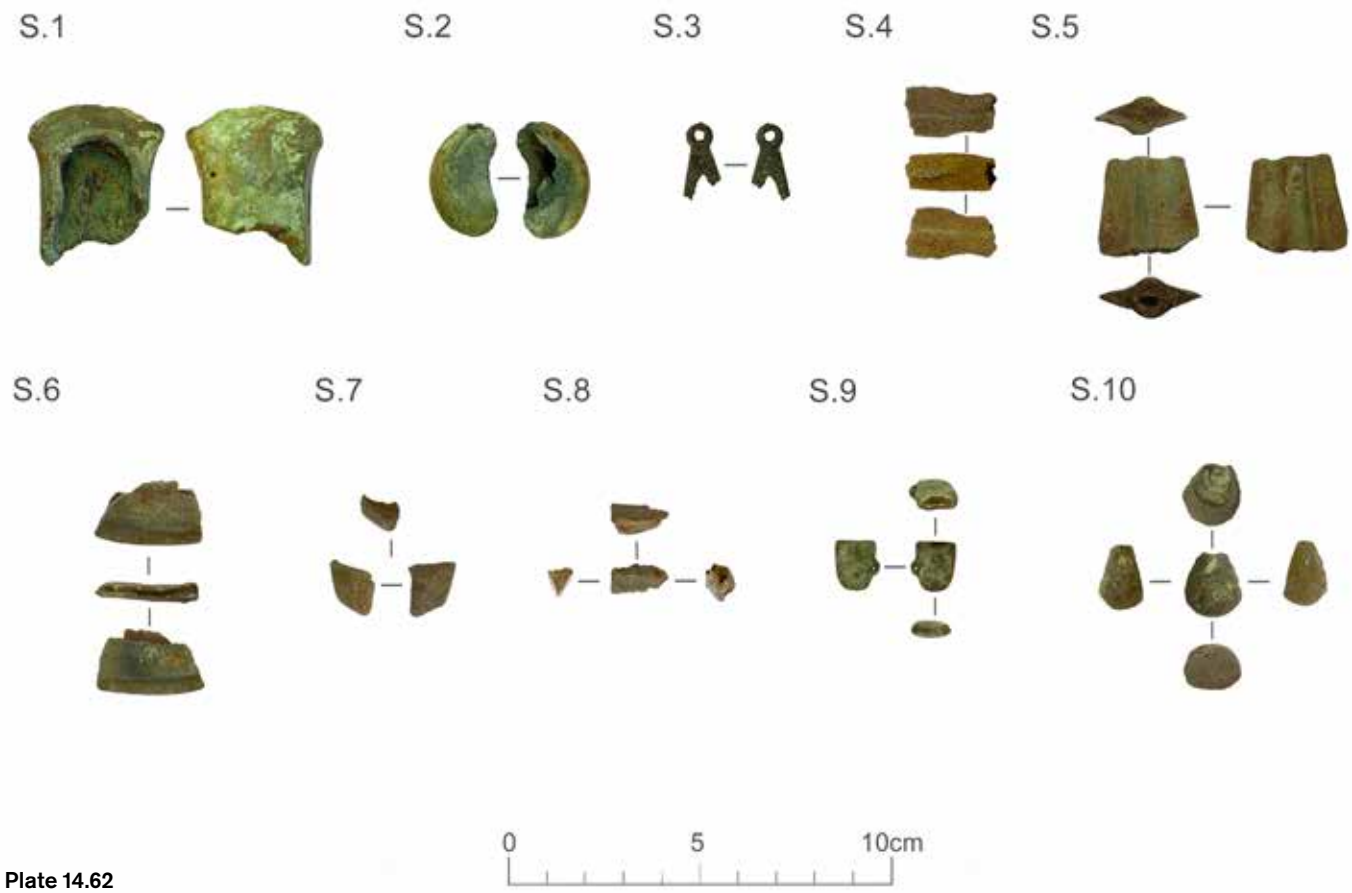


Plate 14.62

Broken Bronze Age copper alloy arrowhead, with raised central rib. The fragment comprises the base of the blade and the upper part of the socket; both the tip of the blade and the base of the socket are broken off.
Wt: 10.5g; L: 24mm; W: 14.6mm; T: 10.5mm

S.5: Copper alloy spearhead (Pl. 14.62)
NCM: yellow ticket no. 249
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short length of Bronze Age copper alloy spearhead, with raised central rib. Missing both tip and base, it is broken across the section of the blade on both ends, leaving a trapezoidal fragment from the body of the spearhead.
Wt: 18.4g; L: 24mm; W: 26.5mm; T: 10mm

S.6: Copper alloy blade fragment; ?spearhead (Pl. 14.62)
NCM: yellow ticket no. 250
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy blade fragment, with one straight sharp edge, and the rest raggedly torn. Possibly from a Bronze Age bladed implement such as a spearhead.
Wt: 6.2g; L: 28mm; W: 16.5mm; T: 4mm

S.7: Copper alloy ?blade fragment (Pl. 14.62)
NCM: yellow ticket no. 248
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Undiagnostic copper alloy fragment, possibly from a Bronze Age bladed implement.
Wt: 4.3g; L: 18mm; W: 13mm; T: 9mm

S.8: Copper alloy unidentified object fragment (Pl. 14.62)
NCM: yellow ticket no. 89
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of unidentified copper alloy object with one original edge. Triangular in cross-section. Possibly a broken fragment from the edge of a Bronze Age bladed object, though it is too worn and fragmentary to be closely identified.
Wt: 2.7g; L: 15mm; W: 7.4mm; T: 6.3mm

S.9: Copper alloy miniature axe (Pl. 14.62)
NCM: yellow ticket no. 2
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Miniature copper alloy looped and socketed axe, with wide sub-rectangular socketed end, tapering towards a narrower, rounded blade. The integral loop is approximately half-way down one side.

Bliss (2020) has developed a typology for these miniature axes, but this example does not fit neatly into any of his categories, falling somewhere between his Class A ('symmetrical miniature axes with drooping blades, prominent side loops and sub-rectangular-section bodies, with little or no evidence of mouth mouldings' (Bliss 2020, 9))

and Class C1 ('Sub-rectangular miniature axes with elongated bodies … neatly made miniatures with either straight or inwardly-tapering sides which transition into rounded blades …, the side-loop on or close to the socket mouth' (*ibid.*, 12)). It lacks both the elongated body of Class C, and the distinctive 'drooping' form of Class A. Miniature socketed axes are most common as unstratified stray finds (Robinson 1995; Bliss 2020). Bliss's corpus comprises over 150 objects (more than four times the number catalogued 25 years earlier by Robinson), but the vast majority of these are metal-detected finds reported through the PAS. There are examples from more secure contexts. Two appear within the multi-period Salisbury Hoard (BM 1998,0901.44, 1998,0901.80; Robinson 1995; Bliss 2020), and they are also known from excavations at long-lived midden deposits such as Whitchurch (Warwickshire) and Potterne (Wiltshire), as well as Late Iron Age hilltop settlements and shrines (Farley 2011; Bliss 2020). They have been broadly dated anywhere from the Bronze Age to Roman period (Robinson 1995; Bliss 2020), but the comprehensive recent reappraisal by Bliss suggests that the few finds from stratified contexts would support a manufacturing date in the Late Bronze Age or Earliest Iron Age for most of these objects, though they seem in some cases to have been re-deposited at Late Iron Age and Roman period shrine sites (Bliss 2020, 22), as may indeed have occurred at Snettisham.
Wt: 2.6g; L: 13mm; W: 10mm (socket mouth); T: 4mm (max.)

S.10: Copper alloy 'moustache' mount (Pl. 14.62)
NCM: yellow ticket no. 10
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fitting taking the form of a tear-shaped lobe, decorated with two raised ribs. The rounded 'base' of the lobe, where it may have been attached to a larger object, is flat on one side, and hollow; this area now contains a mineralised accretion. The object narrows towards the other end of the lobe, where the tip has broken off.

This unusual fitting may be related to an enigmatic group of objects known as 'moustache mounts'. Davey (2020) has identified around 60 such 'UMO's ('Unidentified Moustache-shaped Objects'), distributed throughout southern England. They are most common as unstratified stray finds, and so cannot be closely dated. One appears in the multi-period Salisbury Hoard (BM 1998,0901.201), which includes Middle Bronze Age to Late Iron Age material. Elsewhere, they have come from sites producing more or less exclusively Bronze Age material (see e.g. PAS ID: SF9183 from Mildenhall, Suffolk) so a Middle to Late Bronze Age date is just as plausible as an Iron Age origin for these objects. There are a range of attachment mechanisms, from perforations to rivet holes, or sockets, though their function is not clear. A range of uses have been suggested, from decorative mounts to dagger pommels or chapes. Davey (2020) divides them into double-lobe and single-lobe types. His double-lobe forms are 'Dali' (e.g. PAS ID: HAMP-6F4C45), 'Pincer' (e.g. PAS ID: NMGW-AF1FCC), 'Kitchener' (e.g. PAS ID: NARC-6A4546), and 'Headphone' (e.g. PAS ID: HAMP-E8A481), while the single-lobe types are 'Shell' (e.g. PAS ID: WAW-83E1E3, SF-E76AB6 and SUSS-3AEC48) and 'Mussel' (e.g. PAS ID: SOM-7D864D). This fitting, if it is a moustache mount, most closely resembles a single-lobed 'Shell' type, missing its tip. Around 20 of these single-lobed, 'shell' type mounts are known, but their function is unclear (Davey 2020).
Wt: 9.7g; L: 17mm; W: 15mm; T: 12mm

Phase 3–4 Metalwork: Late Iron Age and Early Roman finds

Torcs, bracelets and related components contemporary with the hoards

Gold/silver alloy
S.11a–b: Fused composite group (Pl. 14.63)
Site code: SN/KD
Findspot: Area 3. Possible outlier from Hoard F?
Context details: Metal-detected stray find from 1990 excavation.
[Analysed: see Ch. 18]
Wt: 80.0g (Total weight for S.11a–b)

S.11a: Gold/silver alloy torc
TUBULAR (TYPE 4/5)
BM: 1991,0407.57
Gold/silver alloy Type 4 or 5 tubular torc fragment with lines of punched dotted decoration creating a line of elongated diamond shapes along the torc. Broken/torn at both ends and bent into a tight V-shape. Part melted, with numerous small fused additions. See Ch. 21 for discussion of decoration.
D(nr): 13.5mm; L: 66.7mm

S.11b: Gold/silver alloy torc/bracelet
MSCC: (2P)R
BM: 1991,0407.47
Fragment of gold/silver alloy multi-strand torc/bracelet comprising a single-loop terminal and part of the neck-ring/body. Stage II construction of two circular-section wires plied together. The terminal loop is continuous, extending to form the neck-ring wires. The wires are broken at the other end, and one is additionally broken in the middle. The whole fragment is bent, twisted and part melted, with small fused additions.
D(nr): 5.9mm; D(wire): 3.1mm; D(term): 18.0mm;
L: 104.5mm

S.12: Iron tubular torc core (Pl. 14.63)
TUBULAR (TYPE 6)
NCM: 1999.44
Findspot: Not recorded. Possibly related to Hoard A, which has produced the only other comparable torcs from Snettisham.
Context details: Metal-detected stray find 1999.
Remains of the iron core of a large Type 6 tubular torc, in four parts; two have been glued together. The metal is rectangular in cross-section and when placed together the curved pieces form a roughly circular shape. There are the remains of a possible widened terminal on one of the

S.11a-b

S.12

S.13

S.14

S.15

S.16

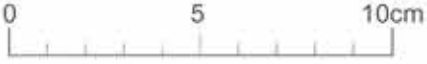


Plate 14.63

fragments, although the shape is too badly corroded to reconstruct.
Wt: 66.8g (total); D(term): 30.0mm (max.); L: 116.8mm (largest frag.); 160.0mm (two larger fragments, as they join); W: 14.0mm; T: 19.0mm

S.13: Gold/silver alloy torc (Pl. 14.63)
TUBULAR (TYPE 4)
BM: 1991,0407.40; Site code: SN/RO
Findspot: Area 15
Context details: Metal-detected stray find from 1990 excavation.
[Analysed: see Ch. 18]
Gold/silver alloy Type 4 tubular torc terminal, neck-ring broken at one end, and the whole fragment bent into a tight V-shape (see **Figs 17.9–10, 21.33**). The side of the terminal is decorated with raised and inscribed decoration. Near the terminal this decoration takes the form of a humanoid face with raised, lentoid-shaped eyes. Leading off from the face is a raised sinuous band. Decoration around this band comprises a series of concentric rings and areas of stippling. A double cordon around the edge marks the end of the terminal. The circular face of the buffer terminal is flat and undecorated. See Chapter 17 for further information on the manufacture, and Chapter 21 for discussion of the decoration.

Notes from scientific analysis (Nigel Meeks)
This tubular sheet terminal is relatively narrow and has been broken away from the rest of the neck-ring (the remainder of the object is missing). There is a kink in the tube about half-way along it where it has been folded. There is a soldered seam running along the interior length of the tube and the tubular terminal end is capped with a plain sheet with a circumferential ridge which is soldered in place. The embossed decoration is enhanced with details within the design that have been added by chased lines and punched dot decoration, for example the eyes (see **Figs 17.9–10**).

There is a transverse soldered seam joining two narrow parts of the tubular terminal. This might be the position of the point at which the sheet terminal was originally joined to the neck-ring to make the complete torc. The soldered area has been over-punched with a thin linear decoration to conceal the join (see **Fig. 17.10c**). The manufacture from multiple components is logical, as it would have been very difficult to make a complete thin tubular torc from a single piece of sheet.

The terminal also has an osmium-iridium inclusion in the sheet (**Fig. 14.45**). The presence of this hard metallic particle shows the gold was from an alluvial source and was not refined. The inclusion does not dissolve in molten gold so passes through to the hammered sheet (Ogden 1977; Meeks and Tite 1980).
Wt: 39.0g; D(term): 15.8mm; L: 65.4mm

S.14: Gold/silver alloy torc (Pl. 14.63)
TUBULAR (TYPE 1)
NCM: yellow ticket no. 34
Findspot: Wooded area to west of main site

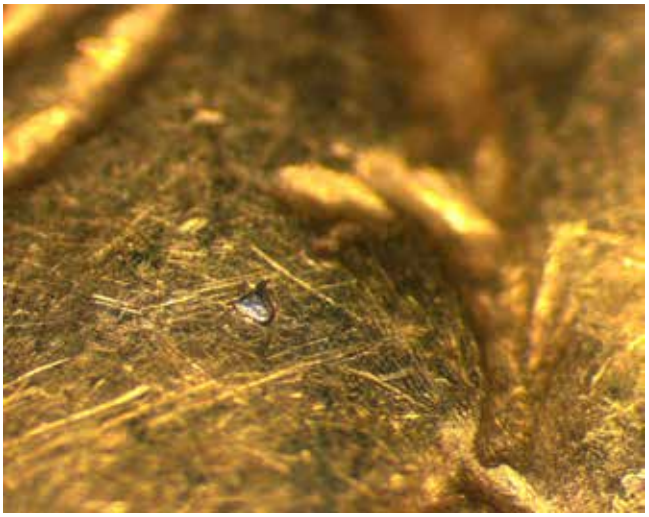


Figure 14.45 Detail of torc terminal S.13 showing the hard silvery coloured Os/Ir inclusion

Context details: Metal-detected stray find 2003–9.
Short length of gold/silver alloy tube, forming a hollow wire, broken at both ends. Bent and squeezed closed at one end. Possibly from the neck-ring of a Type 1 tubular torc.
Wt: 4.3g; D(nr): 5.0mm; L: 40.0mm

S.15: Gold/silver alloy ?torc (Pl. 14.63)
?TUBULAR (?TYPE 2/TYPE 6)
BM: 1992,1203.6
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Thin circular gold/silver alloy ring, flat in cross-section. Probably a fragment or component from a tubular torc of Type 2 or Type 6 form.
Wt: 2.0g; D(ext): 25.5mm; T: 1.5mm

S.16: Gold/silver alloy torc (Pl. 14.63)
MSCC: (2P)R
NCM: 1969.55.3
Published reference: Burns 1971, 228–9
Findspot: South-west corner of the 'gold field', possibly thrown by the plough
Context details: Found during ploughing in 1968.
[Analysed: see Appendix 5 and Ch. 18]
Complete gold/silver alloy multi-strand torc (see **Fig. 17.61**). Slightly thickened ring terminals and Stage I neck-ring comprised of two thick wires, circular in cross-section, plied together.

Notes from scientific analysis (Nigel Meeks)
The torc is of a solid gold/silver alloy, a thick wire two-strand neck-ring design with simple ring terminals. The wire is essentially of circular-section form but there are still longitudinal facets remaining in the recessed regions showing that the hammered torc wires have had extensive polishing since their original twisting, either as a post-manufacture process or as use wear over a period of time. The torc could have been made from a single length of thick wire (about 140cm long), the centre point of this wire being bent double around a mandrel or rod to form one loop. With

S.17

S.18

S.19

S.20

S.21

S.22

S.23

S.24

S.25

S.26

S.27

S.28

S.29

0 5 10cm

Plate 14.64

the wire ends firmly clamped, the mandrel could have been turned in a clockwise direction to twist the parallel wires together. This leaves the problem of finishing the other loop formed by bending the two wire ends around a mandrel and cutting to length – probably leaving an overlap to be fused, forged and filed.

However, both terminals both have a more bulbous thickness than the main wires and there is clear evidence of seams (see **Fig. 17.61a–b**). This might suggest that two wires were used rather than one and that both terminals needed to be closed by the addition of further metal. The thickening of the terminals may have been achieved by casting-on metal (this technology was used on many torcs in the form of complete cast terminals) then hammering to form the thicker terminals. Such a process would close, fuse, thicken and cover the cut ends of the wires. Similar evidence is found on the terminals on torc L.3. An additional parallel is the thickened terminals seen on the Ipswich torcs (Brailsford 1968; Brailsford and Stapley 1972) that have more refined ring terminals with elaborate cast embellishments on wire neck-rings of similar diameter.
Wt: 350.8g; D(ext): 170.0mm; D(nr): 11.8mm; D(wire): 5.4mm; D(term): 31.5mm

S.17: Gold/silver alloy torc (Pl. 14.64)
MSCC: (2P)R
NCM: 1965.30.1
Published reference: Burns 1971, 228–9
Findspot: Area 2
Context details: Found during ploughing in 1964.
[Analysed: see Appendix 5 and Ch. 18]
Gold/silver alloy multi-strand torc, complete, but bent outwards from its original form (see **Figs 17.62, 20.12**). Slightly thickened ring terminals, each with a knob-shaped protrusion on the exterior, at the very end of the ring, that looks integral. These flared knobs are most likely the remains of the sprues from casting-on additional material to the terminals to form the thickened rings (see Ch. 17 for more on casting-on of terminals). The Stage II neck-ring is comprised of two thick wires, circular in cross-section, plied together.
Wt: 624.0g; D(nr): 14.0mm; D(wire): 6.2mm; D(term): 40.0mm; L: 285.0mm

S.18: Gold/silver alloy torc (Pl. 14.64)
MSCC: (2P)R
NCM: 1977.307
Findspot: To north-west of 'gold field'
Context details: Found during ploughing in 1973.
[Analysed: see Appendix 5]
Complete gold/silver alloy multi-strand torc, broken close to one of the terminals, but the two fragments join. The whole torc has been stretched outwards slightly from its original form. This could be a result of deliberate breakage or simply plough damage. Simple single-loop terminals and Stage II neck-ring comprised of two wires, circular in cross-section, plied together.
Wt: 72.5g; 15.5g; D(ext): 180mm (reconstructed); D(nr): 8.0mm; D(wire): 3.1mm; D(term): 18.0mm

S.19: Gold/silver alloy torc (Pl. 14.64
MSCC: (4P(?5C))R
BM: 1992,1203.4
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
[Analysed: see Ch. 18]
Buffer terminal from a gold/silver alloy multi-strand torc (see **Figs 17.67a–c**, **21.27**). Its flat face is decorated with keeled-roundel and circle motifs surrounded by three fin-shaped motifs filled with basket-hatching, enclosed by a raised rim. The terminal is flat on the reverse, with stubs of neck-ring wires protruding. The terminal appears to have been directly cast onto the neck-ring. Very little of the Stage III neck-ring survives, but where the wires have broken away at the back the beginnings of four ropes of circular-section strands are visible. It is not clear how many strands were coiled to make each rope, but it was most likely five or, perhaps, six. The four ropes were originally plied together.

Notes from scientific analysis (Nigel Meeks)
This single terminal is another example of an engraved buffer type. The fact that it has broken free from the torc wires except for a few short fragments allows study of the back, showing the details of the cast-on structures and the construction of the (now missing) neck-ring (see **Fig. 17.67b–c**). One of the wires from the back is seen protruding through to the front (see **Fig. 17.67a**).

The terminal is cast onto the wires and this is clearly seen on the back, which has four circular impressions of the original coiled ropes of the neck-ring. Each depression has a small fragment of the original wire fused into place. In the centre of each coil is a dimpled mound of the cast terminal metal that filled the wire coil to which it fused, or at least mechanically encapsulated, firmly holding the wires in place. Similarly, the outer edges of the coiled wires are firmly locked into position by the cast metal. The remaining wire fragments are broken (stress corrosion) showing that the coiled wires were originally firmly held to the terminal and have not simply fallen out. The wires appear to be round in cross-section, probably with flat facets, which can just be seen on some wires.

The oblique side view of the back of the terminal (see **Fig. 17.67c**) shows one coil of wires has five visible wire fragments (and possibly a sixth out of sight) tightly coiled together into a hollow spring-type spiral.

The coil was made by coiling all of the wires at the same time around a rod, organic core (Ch. 19), or mandrel, in order to allow the tight spiral to be made, and importantly to maintain the round hollow core by preventing the wires collapsing onto themselves during twisting. Four of these spiral forms were made for this torc. The nearest similar spiral construction is seen on the much larger torc L.19 in which the four coils were plied together with only a few turns between the terminals. It would seem reasonable to suppose that the coiled ropes of terminal S.20 were similarly twisted together. The number of turns of the four coils that can be safely put onto these hollow core torcs was limited by the diameters of the coiled components. Over-tightening would

deform the torcs. Once damaged, it would be almost impossible to return them back to shape.

After the body of the neck-ring was made, the ends were clamped into their twisted form to prevent them untwisting. The ends were then squared off and prepared to receive moulding for the lost-wax terminal casting. The back of the terminal (see **Fig. 17.67b**) shows file marks where the casting was abraded to smooth it during finishing.
Wt: 6.1g; D(term): 19.0mm; T: 3.6mm

S.20: Gold/silver alloy torc (Pl. 14.64)
MSCC: (3P(2PZ))R
BM: 1991,0501.228
Jackson no.: 507
Findspot: Not recorded
Context details: Metal-detected stray find August 1990.
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage III construction of three ropes plied together, each of which is made up of two circular-section wires which are themselves plied together Z-twist.
Joining/related fragments: Probably part of the same torc as J.2 (which was disturbed by ploughing).
Wt: 19.0g; D(nr): 9.8mm; D(rope): 4.5mm; D(wire): 2.3mm; L: 78.3mm

S.21: Gold/silver alloy torc (Pl. 14.64)
MSCC: (?2P(2P))R
BM: 1992,1203.3
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Fragment of gold/silver alloy multi-strand torc comprising a double-loop terminal and short length of neck-ring, broken at the other end. What survives of the neck-ring is a Stage II component of two circular-section wires plied together, but this is curved in a way which strongly suggests it originally formed part of a Stage III construction, probably of two such ropes plied together, giving a triple-loop terminal. The loop terminal is continuous with the neck-ring wires. There is some thickening of the wire at the terminal, and what may be a hammered overlap join. The whole terminal is quite distorted as if twisted or crushed.
Wt: 7.7g; D(rope): 4.0mm; D(wire): 2.1mm; D(term): 22.1mm; L: 35.4mm

S.22: Gold/silver alloy torc (Pl. 14.64)
MSCC: (2PZ(2P))R
BM: 1992,1203.2
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Fragment of gold/silver alloy multi-strand torc neck-ring, cut at both ends. Stage III construction of two ropes plied together Z-twist, each of which is made up of two circular-section wires which are themselves plied tightly together.
Wt: 11.8g; D(nr): 7.1mm; D(rope): 3.8mm; D(wire): 1.8mm; L: 78.1mm

S.23–9: Gold/silver alloy torc (Pl. 14.64)
MSCC: (4P)R
This group of fragments, split between the BM and NCM collections, are probably part of the same torc. There are known joins between S.23 and S.29, and possible joins between S.25, S.27 and S.28.

S.23: BM: 1991,0501.231
Jackson no.: 510
Findspot: Not recorded
Context details: Metal-detected stray find August 1990.
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of four circular-section wires plied together.
Wt: 46.2g; D(nr): 9.5mm; D(wire): 3.9mm; L: 98.2mm

S.24: BM: 1991,0501.232
Jackson no.: 511
Findspot: Not recorded
Context details: Metal-detected stray find August 1990.
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of four circular-section wires plied together.
Wt: 46.2g; D(nr): 9.8mm; D(wire): 4.0mm; L: 116.4mm

S.25: NCM: 1990.204
Findspot: Area 20
Context details: Metal-detected stray find 1989.
Fragment of multi-strand gold/silver alloy torc, consisting of a short length of neck-ring broken at both ends. The Stage II construction consists of four circular-section wires plied together. Most of the wires are broken in roughly the same place, except for one wire which is more than twice as long as the other three.
Wt: 30.5g; D(nr): 9.5mm; D(wire): 4.0mm; L: 93.0mm

S.26: BM: 1991,0501.230
Jackson no.: 509
Findspot: Not recorded
Context details: Metal-detected stray find August 1990.
Fragment of gold/silver alloy multi-strand torc, comprising part of a double-loop terminal, formed from circular-section wire. Broken at both ends.
Wt: 13.5g; D(wire): 3.9mm; D(term): 27.3mm; L: 33.8mm

S.27: NCM: 1990.203b
Findspot: Area 20
Context details: Metal-detected stray find 1989.
Short length of circular-section wire, most likely a fragment from a gold/silver alloy multi-stand torc. The spiralling curvature suggests it was originally part of a Stage II coiled or plied neck-ring.
Wt: 6.6g; D(wire): 4.0mm; L: 54.0mm

S.28: NCM: 1990.203a
Findspot: Area 20
Context details: Metal-detected stray find 1989.
Short length of circular-section wire, broken at both ends, most likely a fragment from a gold/silver alloy multi-stand torc. The spiralling curvature suggests it was originally part of a Stage II coiled or plied neck-ring.
Wt: 6.5g; D(wire): 4.0mm; L: 51.0mm

S.29: BM: 1991,0501.229
Jackson no.: 508
Findspot: Not recorded
Context details: Metal-detected stray find August 1990.
Fragment of circular-section gold/silver alloy wire, broken at both ends. Bent in a way which suggests it once formed part of a Stage II multi-strand torc neck-ring.
Wt: 2.3g; D(wire): 4.3mm; L: 19.5mm

S.30: Gold/silver alloy torc/bracelet (Pl. 14.65)
MSCC: (3P)R
NCM: yellow ticket no. 93
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of gold/silver alloy multi-strand torc neck-ring or bracelet body, broken at both ends. Stage II construction of three circular-section wires plied together.
Wt: 7.6g; D(nr): 9.0mm; D(wire): 4.0mm; L: 26.0mm

S.31–9: Gold/silver alloy torc (Pl. 14.65)
MSCC: (2P)F
[Analysed: see Appendix 5 for S.31, and Ch. 18 for S.32 and S.34–9]
Fragments S.31–9, split between the BM and NCM collections, are probably part of the same torc (see **Figs 17.14, 17.17, 17.32**). S.40 may also be part of this object. There are joins between S.33, S.38 and S.39. All the breaks are torn in a way which may suggest plough damage, rather than deliberate fragmentation before deposition.

S.31: NCM: 1965.30.2.1
Published reference: Burns 1971, 228–9
Findspot: Area 3
Context details: Found during ploughing in 1964.
Single-loop terminal from a gold/silver alloy multi-strand torc, with a very short surviving length of neck-ring. The terminal looks to originally have been a double loop, but only one loop remains. The Stage II neck-ring was made up of two thick, faceted rods plied together. The loop fragment is broken at the neck-ring end (with a flat original terminal at the other), and the smaller fragment is broken at both ends.
Wt: 109.9g (total of 84.5g; 25.4g); D(wire): 9.0mm; D(term): 60.0mm; L: 61.5mm; 35.0mm

S.32: BM: 1991,0407.50; Site code: SN/AO
Findspot: Area 1
Context details: Metal-detected stray find from 1990 excavation.
Single-loop terminal from a gold/silver alloy multi-strand torc. The thick, faceted rod is broken at the neck-ring end, but the other end of the loop is an original flat terminal.
Wt: 89.1g; D(wire): 8.3mm; D(term): 42.3mm; L: 62.5mm

S.33: BM: 1991,0501.224
Jackson no.: 503
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Single-loop terminal from a gold/silver alloy multi-strand torc. The thick, faceted rod is broken at the neck-ring end, but the other end of the loop is an original flat terminal.
Wt: 81.9g; D(wire): 8.7mm; D(term): 42.3mm; L: 58.0mm

S.34: BM: 1991,0501.226
Jackson no.: 505
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Single-loop terminal from a gold/silver alloy multi-strand torc, formed from thick faceted rod. The fragment comprises around half of the loop, one flat original end, the other end broken.
Wt: 36.4g; D(wire): 8.7mm; L: 41.8mm

S.35: BM: 1991,0407.51; Site code: SN/KM
Findspot: Area 5
Context details: Metal-detected stray find from 1990 excavation.
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of two thick, faceted rods plied together.
Wt: 193.7g; D(nr): 16.6mm; D(wire): 9.0mm; L: 120.5mm

S.36: BM: 1991,0407.49; Site code: SN/AU
Findspot: Area 1
Context details: Metal-detected stray find from 1990 excavation.
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of two thick, faceted rods plied together.
Wt: 179.4g; D(nr): 16.1mm; D(wire): 8.9mm; L: 116.6mm

S.37: BM: 1992,1203.1
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of two thick, faceted rods plied together.
Wt: 105.7g; D(nr): 16.6mm; D(wire): 9.1mm; L: 77.4mm

S.38: BM: 1991,0501.223
Jackson no.: 502
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Fragment of gold/silver alloy multi-strand torc neck-ring, broken at both ends. Stage II construction of two thick, faceted rods plied together.
Wt: 104.3g; D(nr): 16.8mm; D(wire): 8.8mm; L: 72.3mm

S.39: BM: 1991,0501.225
Jackson no.: 504
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Fragment of gold/silver alloy multi-strand torc, comprising a short length of neck-ring, broken at both ends. All that remains is a length of thick, faceted rod, but it is bent in a

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10cm

Plate 14.65

way which shows that it was originally part of a Stage II construction of two such rods plied together.
Wt: 31.5g; D(wire): 8.5mm; L: 41.9mm

Notes from scientific analysis (Nigel Meeks)
This particular fragmentary/broken multi-strand torc (S.31–9) has a very interesting physical form. There are a number of pieces (with different registration numbers) and they can all be joined into a single heavy torc. The torc was made from two of the thickest rods in the assemblage (9mm diameter) and also has the most facets (about 20). The torc rods are very tightly twisted together to form the neck-ring, probably as tight as it is possible to make them, and it would have required some force to achieve this.

The advantage of this torc from the examination point of view is that it is the brittle fractures to the neck-ring (seemingly without distortion from bending, and without deliberate cuts) make it possible to study the cross-section as well as the outer surface, revealing many of the manufacturing processes. At places along the length of the rods are thin overlapped seams or folds in the metal which are clearly thinned from hammering (see **Fig. 17.14c–d**). These are very clearly seen on one of the loop terminals and may well be from the edges of a deep single groove that is seen in the fractured ends of the rods (see **Fig. 17.14b**). This groove reaches to the very centre of the rod and appears at all of the breaks, suggesting that it runs the entire length of the rods, appearing at the surface as a single seam. There can be only one explanation in this case. The starting piece of metal for the rod must have been a thick flat strip of double width compared to its thickness that was subsequently folded along its length, possibly with a cut or chiselled centre-line groove to assist folding to double thickness. This folding would have produced a square rod for subsequent hammering and rounding to the desired thickness. This may seem to be an unnecessarily complicated process, compared to simply hammering a larger starting rod. However, the groove would actually facilitate the tight twisting of the thick pair of rods by allowing the individual twisting rods to slide internally (as well as over each other) rather than having to deform the very thick solid core metal. In this way the rods would twist more tightly and with less effort.

A similar seam is found on another gold torc fragment F.5c (see **Fig. 17.18a–b**) where the seam has opened very wide from the surface to reveal the deep groove to the centre of the thick wire. This process of using a folded strip to produce thick wires may be fairly common and could explain why a number of torc wires of various thickness have a continuous single line/groove/seam running along their lengths.

This seam is therefore unlike the double seam found on traditional hammered block-twist wires commonly seen on gold wire jewellery of the Greek period (Fitton 2009; Williams and Ogden 1994; Oddy 1977), although a similar hand hammering method was used.

The wires have a golden surface colour while the core is a pinkish colour. The colour difference indicates that the surface has been enriched in gold. Surface SEM-EDX analysis gave a typical composition of Au 63.7%, Ag 35.1, Cu 1.2%., whereas a small cleaned (shiny) area of the core gave values of about Au 30.9%, Ag 45.6%, Cu 23.5% putting the alloy into the silver-gold-copper alloy group of (see **Table 17.5**). This gives a very low melting point alloy (*c.* 810°C, see **Fig. 17.47a–b**). The matt, pink colour of the fractured surface of the fragments is due to re-deposited copper on the original fracture over time. The metallography and analysis of a polished section is illustrated (**Fig. 17.32a–b**), showing the thickness and microstructure of the enriched gold layer compared to the core alloy and enabling the method of enrichment/gilding of this apparently thin golden layer to be determined (Ch. 17).

S.40: Gold/silver alloy torc (Pl. 14.65)
BM: 1991,0407.66; Site code: SN/KE
Findspot: Area 3
Context details: Metal-detected stray find from 1990 excavation.
Single-loop terminal from a gold/silver alloy multi-strand torc. The thick, faceted rod is raggedly broken at the other end, as if wrenched apart from the neck-ring. The other end of the loop is an original flat terminal.
Joining/related fragments: Possibly part of the same torc as fragments S.31–9.
Wt: 51.7g; D(wire): 9.0mm; L: 60.6mm

S.41–4: Gold/silver alloy rod/?torc (Pl. 14.65)
MSCC: (?2P)R
S.41–4 are very similar and may be from the same torc (see **Fig. 20.21**). Each fragment consists of a short length of circular-section gold/silver alloy rod, cut at both ends, showing that this object was deliberately fragmented before deposition. Each rod fragment is bent in a way which suggests it once formed part of a Stage II torc neck-ring, probably made from two such rods plied together.

S.41: BM: 1991,0407.59; Site code: SN/KH
Findspot: Area 4
Context details: Metal-detected stray find from 1990 excavation.
Wt: 16.8g; D(wire): 8.6mm; L: 28.9mm

S.42: BM: 1992,1203.5
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Wt: 13.8g; D(wire): 9.2mm; L: 25.5mm

S.43: BM: 1992,1202.2; Site code: ST/BM
Findspot: Area 19
Context details: Metal-detected stray find from 1991 excavation.
Wt: 10.3g; D(wire): 9.0mm; L: 20.1mm

S.44: BM: 1991,0501.233; Site code: SN/NJ
Findspot: Not recorded
Context details: Metal-detected stray find from 1990 excavation.
Wt: 11.9g; D(wire): 10.2mm; L: 14.5mm; T: 7.9mm

S.45: Gold/silver alloy torc/bracelet (Pl. 14.65)
MSCC: (2P)R
BM: 1991,0407.48; Site code: SN/RC
Findspot: Area 12
Context details: Metal-detected stray find from 1990 excavation.
Fragment of gold/silver alloy multi-strand torc or bracelet comprising part of neck-ring/body, cut at both ends. Stage II construction of two circular-section wires plied together.
Wt: 6.4g; D(nr): 8.1mm; D(wire): 4.5mm; L: 28.0mm

S.46: Gold/silver alloy lump; wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 81
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Amorphous lump of gold/silver alloy, incorporating a part-melted length of wire rope, formed from two wires plied together. This Stage II component may originally have been part of a multi-strand torc or bracelet.
Wt: 0.7g; D(wire): 1.0mm; L: 8.0mm; W: 5.0mm; T: 3.8mm

S.47: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 73
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Four curved lengths of twisted square-section gold/silver alloy wire, all broken and part melted. Now fused together with an additional lump of gold/silver alloy. The wires are curved in a way which suggests they originally formed part of a coiled component in a multi-strand torc or bracelet.
Wt: 3.2g; D(nr): 8.0mm; D(wire): 1.8mm; L: 22.0mm

S.48: Gold/silver alloy torc (Pl. 14.65)
BM: 1991,0407.60; Site code: SN/MY
Findspot: Area 9
Context details: Metal-detected stray find from 1990 excavation.
Buffer terminal, most likely originally from a gold/silver alloy multi-strand torc (see **Fig. 21.18**). Cast, and solid, it is unclear how the neck-ring would have been affixed. Flat on the back, the front is decorated with a raised rim around the circumference, and a simple tripartite relief design in the centre formed from three lentoid shapes joined end to end to form a triangle, giving a recessed central triangular motif in the negative space created between the lentoids.
Wt: 13.3g; D(term): 21.2mm; T: 6.9mm

S.49: Gold/silver alloy rod/?large ring/?torc (Pl. 14.65)
NCM: yellow ticket no. 30
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Length of curved gold/silver alloy rod, possibly from a large ring or the loop terminal of a torc, cut at each end. Oval-shaped section; flatter on the inner face.
Wt: 10.1g; D(wire): 8.0mm; L: 22.0mm

S.50: Gold/silver alloy ?rod/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 129B
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small fragment of gold/silver alloy faceted rod, whole circumference not preserved. Possibly part of a multi-strand torc or bracelet.
Wt: 0.8g; L: 12.0mm; W: 6.5mm; T: 2.0mm

S.51: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
MSCC: (?2P)R
BM: 1991,0407.53; Site code: SN/AX
Findspot: Area 1
Context details: Metal-detected stray find from 1990 excavation.
Short length of circular-section gold/silver alloy wire, cut at both ends. Bent in a way which suggests it once formed part of a Stage II torc neck-ring or bracelet body, probably made from two or three such wires plied together.
Wt: 5.3g; D(wire): 4.9mm; L: 23.2mm

S.52: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
MSCC: (?P)R
BM: 1992,1202.1; Site code: ST/BP
Findspot: Area 20
Context details: Metal-detected stray find from 1991 excavation.
Length of circular-section gold/silver alloy wire, broken at both ends. Bent in a way which suggests it once formed part of a loosely plied Stage II multi-strand torc neck-ring or bracelet body. Heavy corrosion and flaking along the surface.
Wt: 7.6g; D(wire): 4.2mm; L: 75.8mm

S.53: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
MSCC: (?P)R
BM: 1991,0407.52; Site code: SN/KF
Findspot: Area 4
Context details: Metal-detected stray find from 1990 excavation.
Length of circular-section gold/silver alloy wire, cut at both ends. Bent in a way which suggests it once formed part of a Stage II plied multi-strand torc neck-ring or bracelet body.
Wt: 6.1g; D(wire): 3.9mm; L: 33.6mm

S.54: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
MSCC: (?P)R
BM: 1991,0407.56; Site code: SN/EE
Findspot: Area 2
Context details: Metal-detected stray find from 1990 excavation.
Length of circular-section gold/silver alloy wire, cut at both ends. Bent in a way which suggests it once formed part of a Stage II plied multi-strand torc neck-ring or bracelet body. Fractured in the middle of the fragment, as if it has been deliberately bent/broken.

Joining/related fragments: Possibly part of torc J.1.
Wt: 3.7g; D(wire): 4.0mm; L: 31.5mm

S.55: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 78
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy circular-section wire. Possibly originally part of a multi-strand torc or bracelet.
Wt: 1.1g; D(wire): 4.0mm; L: 10.0mm

S.56: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 142
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of gold/silver alloy circular-section wire. Cut at both ends. Curved in a way which suggests it was originally part of a multi-strand torc or bracelet.
Wt: 3.1g; D(wire): 3.2mm; L: 28.5mm

S.57: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 103
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy circular-section wire. Cut or broken at both ends, and partially melted. Possibly originally part of a multi-strand torc or bracelet.
Wt: 1.4g; D(wire): 3.0mm; L: 15.0mm; W: 5.5mm

S.58: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 91
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy circular-section wire. Cut or broken at both ends, with evidence for hammering or perhaps partial melting. Possibly originally part of a multi-strand torc or bracelet.
Wt: 0.6g; D(wire): 3.0mm; L: 9.0mm

S.59: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 95
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy circular-section wire. Cut at both ends, with evidence for partial melting. Possibly originally part of a multi-strand torc or bracelet.
Wt: 0.6g; D(wire): 3.0mm; L: 9.0mm

S.60: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 122
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy circular-section wire. Cut at both ends. Possibly originally part of a multi-strand torc or bracelet.
Wt: 0.8g; D(wire): 2.7mm; L: 12.0mm

S.61: Gold/silver alloy torc/bracelet (Pl. 14.65)
NCM: yellow ticket no. 70
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of gold/silver alloy circular-section wire, broken at both ends and partly melted. Curved in a way which suggests it originally formed part of a plied structure in a multi-strand torc or bracelet.
Wt: 1.0g; D(wire): 2.5mm; L: 11.0mm

S.62: Gold/silver alloy wire/?torc/bracelet (Pl. 14.65)
NCM: yellow ticket no. 50
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Curved fragment of circular-section gold/silver alloy wire, possibly from a torc or bracelet.
Wt: 0.6g; D(wire): 2.0mm; L: 12.0mm

S.63: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 112
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy circular-section wire. Cut or broken at both ends. Possibly originally part of a multi-strand torc or bracelet.
Wt: 0.3g; D(wire): 2.0mm; L: 8.0mm

S.64: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 28
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of twisted square-section gold/silver alloy wire, possibly from a torc or bracelet. Folded back on itself, hammered, twisted and part melted. Possible additional adhering fragments.
Wt: 2.2g; D(wire): 4.0mm; L: 14.0mm

S.65: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.65)
NCM: yellow ticket no. 144
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of gold/silver alloy twisted square-section wire. Broken at both ends. Curved in a way which suggests it was originally part of a multi-strand torc or bracelet.
Wt: 1.1g; D(wire): 2.0mm; L: 17.0mm

S.66: Gold/silver alloy wire/amorphous lump (Pl. 14.65)
NCM: yellow ticket no. 68
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.

S.67
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S.98
S.99
S.100
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5
10cm

Plate 14.66

Amorphous lump of gold/silver alloy, formed from three part-melted lengths of twisted square-section wire.
Wt: 0.5g; D(wire): 1.0mm; L: 8.0mm; W: 5.0mm

S.67: Gold/silver alloy torc wire/?torc/?bracelet (Pl. 14.66)
BM: 1991,0407.58; Site code: SN/AP
Findspot: Area 1
Context details: Metal-detected stray find from 1990 excavation.
Gold/silver alloy thick circular-section wire, flat at one end and part melted at the other, possibly from a simple torc neck-ring or bracelet body. A short length of twisted square-section wire is fused onto it near the flat end.
Wt: 25.0g; D(wire): 6.1mm; 2.3mm (adhering twisted frag); L: 67.2mm; 11.4mm (adhering twisted fragment)

S.68: Gold/silver alloy wire/?torc/?bracelet (Pl. 14.66)
BM: 1991,0407.54; Site code: SN/JJ
Findspot: Area 2
Context details: Metal-detected stray find from 1990 excavation.
Gold/silver alloy circular-section wire, gently curved, broken at both ends. Possibly a simple torc neck-ring or bracelet body.
Wt: 12.5g; D(wire): 3.5mm; L: 60.9mm

S.69: Gold/silver alloy ring/?torc/?bracelet (Pl. 14.66)
NCM: yellow ticket no. 69
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small gold/silver alloy ring formed from fine, twisted square-section wire. Possibly a torc or bracelet component.
Wt: 0.1g; D(ext): 7.0mm; D(wire): 0.7mm

S.70: Gold/silver alloy sheet/?torc (Pl. 14.66)
NCM: yellow ticket no. 60
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of gold/silver alloy sheet, folded and part melted. Possibly from a tubular torc.
Wt: 1.9g; L: 15.0mm; W: 9.0mm; T: 3.3mm

S.71: Gold/silver alloy sheet/?torc (Pl. 14.66)
NCM: yellow ticket no. 36
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small, clipped fragment of gold/silver alloy sheet. Possibly from a tubular torc.
Wt: 1.2g; L: 14.0mm; W: 7.0mm; T: 1.2mm

S.72: Gold/silver alloy sheet/?torc (Pl. 14.66)
NCM: yellow ticket no. 138
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Torn and partially melted irregular fragment of gold/silver alloy sheet. Possibly from a tubular torc.
Wt: 1.1g; L: 20.0mm; W: 16.0mm; T: 3.0mm

S.73: Gold/silver alloy sheet/?torc (Pl. 14.66)
NCM: yellow ticket no. 64
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of gold/silver alloy sheet, folded and torn. Possibly from a tubular torc.
Wt: 0.8g; L: 12.0mm; W: 9.0mm; T: 0.8mm

S.74: Gold/silver alloy sheet/?torc (Pl. 14.66)
NCM: yellow ticket no. 67
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of gold/silver alloy sheet, folded and torn. Possibly from a tubular torc.
Wt: 0.3g; L: 16.0mm; W: 9.0mm; T: 0.2mm

S.75: Gold/silver alloy sheet/?torc (Pl. 14.66)
NCM: yellow ticket no. 158
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small fragment of gold/silver alloy sheet, torn, with no original edges. Possibly from a tubular torc.
Wt: 0.1g; L: 7.5mm; W: 5.5mm; T: 0.3mm

S.76: Gold/silver alloy strip /?torc (Pl. 14.66)
NCM: yellow ticket no. 66
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of gold/silver alloy strip with rectangular cross-section and raised, central, longitudinal rib on one side. Possibly a component from a tubular torc.
Wt: 0.6g; L: 18.0mm; W: 5.0mm; T: 0.5mm

Copper alloy

S.77: Copper alloy torc (Pl. 14.66)
MSCC: (?6C)R
BM: 1990,1101.21; Site code: SN/KP
Findspot: Area 5
Context details: Metal-detected stray find from 1990 excavation.
Fragment of copper alloy multi-strand torc, comprising a cast torus terminal, with plain head and simple collar. The remains of (?)six circular-section wires are preserved inside, suggesting a Stage II neck-ring formed from six wires coiled together around a hollow core.
Wt: 56.4g; D(term): 29.9mm; L: 35.6mm

S.78: Copper alloy torc (Pl. 14.66)
BM: 1992,0210.1; Site code: SM/AA
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find March 1992. Re-deposited.
Fragment of thick copper alloy torus terminal, most likely from a multi-strand torc. Hollow interior and thick walls. Raggedly broken at the edges, only the very end of the head survives, not the collar where it would have attached to the neck-ring.
Wt: 11.2g; L: 21.9mm; T: 12.3mm

S.79: Copper alloy torc (Pl. 14.66)
MSCC: (7C)T
BM: 1990,1101.22; Site code: SN/EG
Findspot: Area 2
Context details: Metal-detected stray find from 1990 excavation.
Fragment of copper alloy multi-strand torc comprising one plain, slightly expanded buffer terminal with rounded edge and flat face, and a short length of neck-ring protruding from the back. The Stage II neck-ring is formed from seven twisted wires coiled together around a hollow core. A fragment of clay (?)mould remains attached to the inside of the neck-ring where it joins the terminal, perhaps from the casting process.
Wt: 24.2g; D(nr): 13.0mm; D(wire): 2.9mm; D(term): 21.3mm; L: 22.7mm

S.80: Copper alloy torc (Pl. 14.66)
MSCC: (2P)R
BM: 1990,1101.20; Site code: SN/AV
Findspot: Area 1
Context details: Metal-detected stray find from 1990 excavation.
Fragment of copper alloy multi-strand torc neck-ring, with clean flat breaks at both ends. Stage II construction of two circular-section wires plied together.
Wt: 11.4g; D(nr): 8.1mm; D(wire): 4.1mm; L: 46.0mm

S.81: Copper alloy wire/?torc/?bracelet (Pl. 14.66)
MSCC: (?P)R
BM: 1991,0409.22; Site code: ST/HD
Findspot: Area 21
Context details: Metal-detected stray find from 1991 excavation, most likely from 1990 backfill.
Length of copper alloy circular-section wire, broken at both ends. Bent in a way which suggests it may once have formed part of a loosely plied Stage II multi-strand torc neck-ring or bracelet body.
Wt: 7.1g; D(wire): 4.3mm; L: 66.0mm

S.82: Copper alloy wire/?torc/?bracelet (Pl. 14.66)
BM: 1990,1101.43; Site code: SN/MT
Findspot: Area 7
Context details: Metal-detected stray find from 1990 excavation.
Bent length of copper alloy circular-section wire, broken at both ends. Possibly part of the loop terminal from a multi-strand torc or bracelet.
Wt: 3.4g; D(wire): 3.9mm; L: 25.7mm

S.83: Copper alloy rod/?torc/?bracelet (Pl. 14.66)
BM: 1990,1101.48; Site code: SN/RF
Findspot: Area 14
Context details: Metal-detected stray find from 1990 excavation.
Curved section of copper alloy rod, broken at both ends, with relief zoomorphic decoration in the form of a stylised animal head with flaring nostrils (see discussion of decoration in Ch. 21, and **Fig. 21.31**). Surfaces partially hammered flat to give a squarish cross-section. Most likely part of a torc or bracelet.
The closest parallels are from north-east France, *c.* 350–250 BC, cf. Stead and Rigby (1999, 70–1, ML.1709).
Wt: 13.1g; D(wire): 6.8mm; L: 44.2mm

Large and small rings

Gold/silver alloy

S.84: Gold/silver alloy large ring (Pl. 14.66)
BM: 1991,0407.62; Site code: SN/CQ
Findspot: Area 1
Context details: Metal-detected stray find from 1990 excavation.
Fragment of gold/silver large ring, made from a strip with rectangular cross-section. Slightly tapering, broken at both ends.
Wt: 8.1g; L: 38.4mm; W: 10.2mm; T: 2.1mm

S.85: Gold/silver alloy large ring (Pl. 14.66)
BM: 1991,0501.227
Jackson no.: 506
Findspot: Not recorded
Context details: Metal-detected stray find August 1990.
Fragment of gold/silver alloy large ring, made from a strip with rectangular cross-section. Broken at both ends.
Wt: 6.8g; L: 31.7mm; W: 10.3mm; T: 2.0mm

S.86: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
BM: 1992,1202.3; Site code: ST/FS
Findspot: Area 21
Context details: Metal-detected stray find from 1991 excavation, most likely from 1990 backfill.
Fragment of gold/silver alloy strip with rectangular cross-section, broken at both ends. Most likely a fragment of large or small ring that has been bent out of shape, and distorted by heat. Partially melted bubbling/globules all over the surface.
Wt: 11.4g; L: 43.1mm; W: 7.8mm; T: 2.1mm

S.87: Gold/silver alloy strip/?large/small ring (Pl. 14.66)
NCM: yellow ticket no. 31
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Tapering length of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Cut at both ends and slightly bent/distorted.
Wt: 3.5g; L: 34.0mm; W: 6.0mm; T: 2.0mm

S.88: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 124
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Cut at both ends (the long sides of the fragments are the cut ends).
Wt: 3.0g; L: 14.0mm; W: 11.0mm; T: 2.5mm

S.89: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 32
Findspot: Wooded area to west of main site

Context details: Metal-detected stray find 2003–9.
Two joining fragments of a gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. One broken end and one possible original flat terminal.
Wt: 2.6g; L: 33.0mm; W: 7.0mm; T: 1.2mm

S.90: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 52
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Very short fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Cut at both ends, with clear tool marks (the long sides of the fragments are the cut ends).
Wt: 2.0g; L: 13.0mm; W: 7.0mm; T: 4.2mm

S.91: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 38
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of gold/silver alloy strip, with rectangular cross-section, possibly a fragment of large/small ring. Slightly tapered and broken at both ends.
Wt: 1.4g; L: 15.0mm; W: 6.0mm; T: 2.6mm

S.92: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 106
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Broken at both ends.
Wt: 0.8g; L: 11.0mm; W: 4.0mm; T: 1.6mm

S.93: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 99
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Cut at both ends.
Wt: 0.8g; L: 10.0mm; W: 4.0mm; T: 2.0mm

S.94: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 94
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Broken at both ends and partially melted.
Wt: 0.4g; L: 10.0mm; W: 3.0mm; T: 0.9mm

S.95: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 97
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Cut or broken at both ends.
Wt: 0.6g; L: 9.0mm; W: 6.5mm; T: 1.8mm

S.96: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 77
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, curved fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Broken at both ends.
Wt: 0.4g; L: 9.0mm; W: 4.0mm; T: 1.0mm

S.97: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 131
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Very short fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Cut at both ends (the long sides of the fragments are the cut ends).
Wt: 0.7g; L: 7.0mm; W: 7.0mm; T: 2.0mm

S.98: Gold/silver alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 98
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Very short fragment of gold/silver alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Cut at both ends (the long sides of the fragments are the cut ends).
Wt: 0.5g; L: 7.0mm; W: 5.0mm; T: 1.5mm

Copper alloy

S.99: Copper alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 192
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of thick copper alloy strip, curved in cross-section, possibly a fragment of large/small ring. Broken at both ends.
Wt: 3.1g; L: 20.0mm; W: 10.0mm; T: 2.5mm

S.100: Copper alloy strip or ?large/?small ring (Pl. 14.66)
NCM: yellow ticket no. 42
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of copper alloy strip with rectangular cross-section, possibly a fragment of large/small ring. Broken at both ends.
Wt: 2.7g; L: 10.0mm; W: 10.0mm; T: 2.8mm

S.101
S.102
S.103
S.104
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10cm

Plate 14.67

Lump and triangular ingots

Gold/silver alloy

S.101: Gold/silver alloy lump ingot (Pl. 14.67)
BM: 2009,4213.20; Site code: SN/PY
Findspot: Area 10
Context details: Metal-detected stray find from 1990 excavation.
Gold ingot or pellet, oval in plan. Slightly domed on one side and flat on the other. Possible coin blank.
Wt: 7.0g; L: 15.5mm

S.102: Gold/silver alloy lump ingot (Pl. 14.67)
BM: 2009,4213.21; Site code: SN/QA
Findspot: Area 11
Context details: Metal-detected stray find from 1990 excavation.
Gold ingot or pellet, roughly circular in plan. Flat but irregular surface on both sides. Possible coin blank.
Wt: 5.9g; D(ext): 14.5mm

S.103: Gold/silver alloy lump ingot (Pl. 14.67)
NCM: yellow ticket no. 135
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Amorphous gold/silver alloy lump, hammered flat.
Wt: 3.3g; L: 12.0mm; W: 11.0mm; T: 4.0mm

Copper alloy:

S.104: ?Tin/Copper alloy lump ?ingot (Pl. 14.67)
BM: 1991,0409.28
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Large ingot or lump of ?tin/copper, silverish in colour. Squarish in plan (broken at each end), with kite-shaped cross-section.
Wt: 115.1g; L: 34.0mm; W: 40.0mm; T: 20.0mm

S.105: Copper alloy triangular ingot with gold/silver alloy additions (Pl. 14.67)
NCM: yellow ticket no. 245
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small copper alloy ingot, from the base of a triangular crucible. Irregular top surface showing part-melted wire fragments and possibly small amounts of part-melted gold sheet.
Wt: 81.0g; L: 46.5mm; W: 42.3mm; T: 20.0mm

S.106: Copper alloy (?silver alloy/?lead alloy) lump ingot (Pl. 14.67)
BM: 1991,0409.4; Site code: ST/AK
Findspot: Area 17
Context details: Metal-detected stray find from 1991 excavation.
Thick, flattish ingot or lump of copper (or perhaps lead or silver) alloy, circular in plan, with irregular curved edges. Flat on one side, rougher on the other.
Wt: 30.3g; L: 26.2mm; T: 8.3mm

S.107: Copper alloy lump ingot (Pl. 14.67)
NCM: yellow ticket no. 47
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Sub-cuboidal copper alloy fragment, hammered and broken.
Wt: 3.2g; L: 8.0mm; W: 7.0mm; T: 4.0mm

S.108: Copper alloy/lead alloy lump ingot (Pl. 14.67)
NCM: yellow ticket no. 195
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Thick, flattened copper alloy disc.
Wt: 2.6g; D(ext): 9.0mm; T: 4.0mm

S.109: Copper alloy lump ingot (Pl. 14.67)
NCM: yellow ticket no. 143
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy lump hammered into a flat disc.
Wt: 2.1g; D(ext): 12.0mm; T: 4.0mm

S.110: Copper alloy lump ingot (Pl. 14.67)
NCM: yellow ticket no. 118
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of broken, flat, copper alloy disc.
Wt: 1.3g; L: 12.0mm; W: 10.0mm; T: 3.5mm

S.111: Copper alloy lump ingot (Pl. 14.67)
NCM: yellow ticket no. 116
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of broken, flat, copper alloy disc, roughly triangular in plan.
Wt: 1.0g; L: 14.0mm; W: 7.0mm; T: 1.8mm

Straight/bar ingots

Gold/silver alloy

S.112: Gold/silver alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 141
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short section of gold/silver alloy linear ingot with trapezoidal cross-section, cut or broken at one end, with the original terminal intact at the other end.
Wt: 7.8g; L: 16.0mm; W: 11.0mm; T: 6.5mm

S.113: Gold/silver alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 140
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short section of gold/silver alloy linear ingot with trapezoidal cross-section, cut or broken at both ends, possibly part of an ingot bar.
Wt: 5.9g; L: 13.0mm; W: 7.0mm; T: 6.5mm

S.114: Gold/silver alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 110

Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short section of gold/silver alloy rod with oval cross-section, cut at both ends, possibly part of a linear ingot.
Wt: 3.2g; D(wire): 12.0mm; L: 6.0mm

S.115: Gold/silver alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 129A
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short section of gold/silver alloy rod with oval to D-shaped cross-section, cut at both ends, possibly part of a linear ingot.
Wt: 2.4g; L: 12.0mm; W: 7.0mm; T: 2.0mm

S.116: Gold/silver alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 134
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short section of gold/silver alloy bar or rod, cut on three sides, possibly part of a linear ingot.
Wt: 2.1g; L: 11.0mm; W: 6.0mm; T: 5.0mm

Copper alloy

S.117: Copper alloy linear ingot (Pl. 14.67)
BM: 1990,1101.38; Site code: SN/AL
Findspot: Not recorded
Context details: Metal-detected stray find from 1990 excavation.
Length of copper alloy bar, rectangular in cross-section, cut/chiselled on one end, possibly part of a linear ingot.
Wt: 26.7g; L: 29.0mm; W: 23.4mm; T: 7.1mm

S.118: Copper alloy linear ingot (Pl. 14.67)
BM: 1991,0409.12; Site code: ST/DC
Findspot: Area 23
Context details: Metal-detected stray find from 1991 excavation.
Square-section copper alloy bar, tapering towards each end, possibly a linear ingot.
Wt: 17.9g; L: 60.5mm; W: 7.3mm; T: 6.8mm

S.119: Copper alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 173
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of oval-section copper alloy rod, cut at both ends, possibly part of a linear ingot.
Wt: 7.7g; D(wire): 14.0mm; L: 10.0mm; T: 10.5mm

S.120: Copper alloy linear ingot/?wire (Pl. 14.67)
BM: 1991,0409.18; Site code: ST/EG
Findspot: Area 25
Context details: Metal-detected stray find from 1991 excavation.
Circular-section copper alloy wire, gradually tapering towards one pointed end, rounded at the other, possibly a linear ingot. Heavily corroded.
Wt: 7.1g; D(wire): 5.0mm; L: 73.8mm

S.121: Copper alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 155
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of copper alloy bar with trapezoidal section, cut or broken at both ends, possibly part of a linear ingot.
Wt: 5.3g; L: 7.0mm; W: 14.0mm; T: 8.5mm

S.122: Copper alloy linear ingot (Pl. 14.67)
NCM: yellow ticket no. 153
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of oval-section copper alloy rod, chopped at both ends with a chisel, possibly part of a linear ingot.
Wt: 2.0g; L: 14.0mm; W: 10.0mm; T: 6.2mm

Other possible ingots

S.123: Copper alloy ?ingot/?fitting (Pl. 14.67)
BM: 1991,0409.13; Site code: ST/DE
Findspot: Area 23
Context details: Metal-detected stray find from 1991 excavation.
Flat copper alloy arc, rectangular in cross-section and broken at each end, perhaps an unusual ingot. Tool marks are clearly visible where the object has been hammered flat. Slightly flared outer edge.
Wt: 15.7g; L: 44.3mm; W: 17.4mm; T: 4.2mm

S.124: Copper alloy ?ingot/?fitting (Pl. 14.67)
BM: 1991,0409.6; Site code: ST/BG
Findspot: Area 18
Context details: Metal-detected stray find from 1991 excavation.
Short length of copper alloy rod or fragment from the flared edge of a larger object, approximately triangular in cross-section. Heavily corroded.
Perhaps part of a flat copper alloy object with flanged outer edge, similar to S.123.
Wt: 2.1g; L: 17.6mm; W: 8.4mm; T: 5.0mm

Rod and wire

Gold/silver alloy

S.125: Gold/silver alloy wire (Pl. 14.67)
NCM: yellow ticket no. 61
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of thick, gold/silver alloy square-section wire, broken at one end and flat at the other, which is bent over. Clear evidence of folding and hammering on the corners. Possibly from an intermediate stage in wire production. See Chapter 17 for further discussion of wire making.
Wt: 25.9g; D(wire): 4.8mm; L: 8.1mm

S.126: Gold/silver alloy wire/?tool (Pl. 14.67)
NCM: yellow ticket no. 62
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Worked fragment of heavily worn, twisted, square-section gold/silver alloy wire, slightly curved. Hammered flat at one end and worked to a point at the other, possibly for use as a fine tool of some kind.
Wt: 4.3g; D(wire): 1.7mm; L: 79.0mm; W: 3.0mm (flat end)

Copper alloy

S.127: Copper alloy rod (Pl. 14.67)
NCM: yellow ticket no. 198
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of copper alloy rod, one flat and one broken end; may have been hammered to flatten it into a disc.
Wt: 1.4g; D(ext): 7.0mm; L: 4.8mm

S.128: Copper alloy wire (Pl. 14.67)
NCM: yellow ticket no. 175
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Curved copper alloy wire fragment with diamond-shaped cross-section, broken at both ends.
Wt: 1.2g; L: 21.0mm; W: 3.0mm

S.129: Copper alloy wire/strip (Pl. 14.67)
NCM: yellow ticket no. 29
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of flat-section twisted copper alloy wire or strip.
Wt: 0.9g; D(wire): 4.0mm; L: 14.0mm

Metalworking waste

Copper alloy

S.130: Copper alloy casting sprue (Pl. 14.67)
BM: 1990,1101.49; Site code: SN/RR
Findspot: Not recorded
Context details: Metal-detected stray find from 1990 excavation, found during backfilling.
Copper alloy sprue from casting into a mould.
Approximately conical in shape, broken off at narrow end.
Wt: 32.6g; L: 21.0mm; W: 24.7mm

S.131: Copper alloy casting sprue (Pl. 14.67)
NCM: yellow ticket no. 247
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Conical copper alloy lump, most likely a broken-off sprue from casting into a mould.
Wt: 19.6g; D(ext): 23.2mm; L: 25.5mm; T: 15.4mm

Amorphous lumps: worked or incorporating part-melted objects and fused additions

Gold/silver alloy

S.132: Gold/silver alloy lump with incorporated wire (Pl. 14.67)
NCM: yellow ticket no. 63
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Amorphous lump of gold/silver alloy, incorporating a part-melted length of gold/silver alloy wire.
Wt: 11.2g; D(wire): 2.8mm; L: 24.0mm; W: 19.0mm

S.133: Gold/silver alloy lump with incorporated wire (Pl. 14.67)
BM: 1992,1203.12
Findspot: Not recorded
Context details: Metal-detected stray find Dec. 1990–April 1991.
Partially melted lump of gold/silver alloy, with fused additions, including what may be a distorted strand of torc wire.
Wt: 5.1g; L: 12.5mm

S.134: Gold/silver alloy lump with incorporated wire (Pl. 14.67)
BM: 1991,0407.61; Site code: SN/JW
Findspot: Area 2; SN21 (This is a Neolithic pit, but a Rainbird Clarke trench cut the edge of this feature)
Context details: Metal-detected stray find from 1990 excavation.
Gold/silver alloy lump: including fused additions of short, part-melted twisted wire strands (see **Fig. 20.24**).
Wt: 4.9g; L: 16.3mm

S.135: Gold/silver alloy lump with incorporated wire (Pl. 14.67)
NCM: yellow ticket no. 72
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Amorphous lump of gold/silver alloy, incorporating a part-melted length of twisted square-section wire.
Wt: 2.7g; D(wire): 1.6mm; L: 11.0mm; W: 8.0mm; T: 5.0mm

S.136: Gold/silver alloy lump with incorporated wire (Pl. 14.67)
NCM: yellow ticket no. 71
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Amorphous lump of gold/silver alloy, incorporating a part-melted length of twisted square-section wire.
Wt: 0.8g; D(wire): 2.3mm; L: 6.0mm; W: 6.0mm; T: 3.8mm

S.137: Gold/silver alloy worked lump (Pl. 14.67)
NCM: yellow ticket no. 128
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Amorphous gold/silver alloy lump, with some evidence of hammering.
Wt: 4.3g; L: 20.0mm; W: 12.0mm; T: 5.1mm

S.138: Gold/silver alloy worked lump (Pl. 14.67)
NCM: yellow ticket no. 85
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Amorphous gold/silver alloy lump, showing evidence of being deliberately cut.
Wt: 1.5g; L: 10.0mm; W: 6.0mm; T: 4.5mm

Copper alloy

S.139: Copper alloy lump/?disc with incorporated gold/silver alloy additions (Pl. 14.67)
NCM: yellow ticket no. 74
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Broken copper alloy disc, fused on one side to a thin,

amorphous gold/silver alloy lump or part-melted sheet fragment.
Wt: 10.3g; D(ext): 21.5mm (disc); L: 30.0mm; W: 28.0mm; T: 7.0mm

S.140: Copper alloy lump with incorporated gold/silver alloy wire and sheet (Pl. 14.67)
NCM: yellow ticket no. 130
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragments of gold/silver alloy wire and sheet partially melted over an amorphous copper alloy lump.
Wt: 3.9g; L: 7.0mm; W: 12.0mm

S.141–S.234: Amorphous, unworked metal lumps (**Table 14.2**)
All were metal-detected stray finds, some made during the 1990s excavation seasons, others made in 2003–9. Groupings made by the finder were kept, hence some catalogue numbers for 2003–9 finds include multiple lumps.

The finds are ordered by metal (gold/silver alloy, followed by copper alloys, followed by iron), and within each metal group by weight.

For multiple groups, the weight given is the total, and the length the maximum dimension of the largest lump.

Possible beaded torc and bracelet fragments

Copper alloy and iron

S.235–6: Copper alloy and iron terminals, possibly from beaded ?torc/?bracelet (Pl. 14.68)
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
A pair of balustered/thistle-headed iron fittings with copper alloy plating, circular in cross-section. Possibly the terminals of a beaded torc or bracelet.
S.235: NCM: yellow ticket no. 4
Wt: 4.7g; D(ext): 10.0mm (bead); L: 21.0mm
S.236: NCM: yellow ticket no. 258
Wt: 6.5g; D(ext): 11.5mm; L: 19.2mm

S.237–9: Copper alloy beads possibly from ?torc/?bracelet (Pl. 14.68)
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Three beads, possibly from the same beaded torc or bracelet.

S.237: NCM: yellow ticket no. *6*
Circular copper alloy bead with moulded collar at each end and square-shaped central perforation.
Wt: 4.1g; D(ext): 13.0mm (bead); L: 8.0mm

Cat. no.	Museum	Reg. no. or ticket no.	Site code	Findspot*	Discovery year	Material	Wt/g	L/mm (max.)	No. lumps (if multiple)
S.141	NCM	yellow ticket no. 113		Wood	2003–9	Gold/silver alloy	6.2	20.0	
S.142	NCM	yellow ticket no. 136		Wood	2003–9	Gold/silver alloy	3.9	12.0	
S.143	NCM	yellow ticket no. 82		Wood	2003–9	Gold/silver alloy	3.1	17.0	
S.144	NCM	yellow ticket no. 148		Wood	2003–9	Gold/silver alloy	3.1	11.0	
S.145	NCM	yellow ticket no. 108		Wood	2003–9	Gold/silver alloy	2.8	11.0	
S.146	NCM	yellow ticket no. 261		Wood	2003–9	Gold/silver alloy	2.6	16.5	
S.147	NCM	yellow ticket no. 92		Wood	2003–9	Gold/silver alloy	2.2	12.0	
S.148	NCM	yellow ticket no. 120		Wood	2003–9	Gold/silver alloy	1.8	11.0	
S.149	NCM	yellow ticket no. 125		Wood	2003–9	Gold/silver alloy	1.8	8.5	
S.150	NCM	yellow ticket no. 126		Wood	2003–9	Gold/silver alloy	1.8	11.0	
S.151	NCM	yellow ticket no. 149		Wood	2003–9	Gold/silver alloy	1.8	10.0	
S.152	NCM	yellow ticket no. 51		Wood	2003–9	Gold/silver alloy	1.6	11.0	
S.153	NCM	yellow ticket no. 35		Wood	2003–9	Gold/silver alloy	1.4	7.0	
S.154	NCM	yellow ticket no. 37		Wood	2003–9	Gold/silver alloy	1.3	12.0	
S.155	NCM	yellow ticket no. 65		Wood	2003–9	Gold/silver alloy	1.3	9.0	
S.156	NCM	yellow ticket no. 90		Wood	2003–9	Gold/silver alloy	1.3	9.0	

Table 14.2 Tabulated catalogue entries for amorphous, unworked metal lumps S.141–S.234. None are illustrated
* = 'Wood' denotes the wooded area to the west of the main site

Cat. no.	Museum	Reg. no. or ticket no.	Site code	Findspot*	Discovery year	Material	Wt/g	L/mm (max.)	No. lumps (if multiple)
S.157	NCM	yellow ticket no. 100		Wood	2003–9	Gold/silver alloy	1.3	10.0	
S.158	NCM	yellow ticket no. 109		Wood	2003–9	Gold/silver alloy	1.3	10.0	
S.159	NCM	yellow ticket no. 150		Wood	2003–9	Gold/silver alloy	1.3	11.0	
S.160	NCM	yellow ticket no. 104		Wood	2003–9	Gold/silver alloy	1.2	14.0	
S.161	NCM	yellow ticket no. 121		Wood	2003–9	Gold/silver alloy	1.2	12.0	
S.162	NCM	yellow ticket no. 152		Wood	2003–9	Gold/silver alloy	1.2	12.0	
S.163	NCM	yellow ticket no. 56		Wood	2003–9	Gold/silver alloy	1.1	11.0	
S.164	NCM	yellow ticket no. 87		Wood	2003–9	Gold/silver alloy	1.0	8.0	
S.165	NCM	yellow ticket no. 115		Wood	2003–9	Gold/silver alloy	1.0	7.0	
S.166	NCM	yellow ticket no. 123		Wood	2003–9	Gold/silver alloy	1.0	8.0	
S.167	NCM	yellow ticket no. 154		Wood	2003–9	Gold/silver alloy	1.0	9.0	
S.168	NCM	yellow ticket no. 80		Wood	2003–9	Gold/silver alloy	0.9	7.6	
S.169	NCM	yellow ticket no. 79		Wood	2003–9	Gold/silver alloy	0.8	6.0	
S.170	NCM	yellow ticket no. 114		Wood	2003–9	Gold/silver alloy	0.8	4.0	
S.171	NCM	yellow ticket no. 137		Wood	2003–9	Gold/silver alloy	0.8	11.0	
S.172	NCM	yellow ticket no. 101		Wood	2003–9	Gold/silver alloy	0.7	7.0	
S.173	NCM	yellow ticket no. 105		Wood	2003–9	Gold/silver alloy	0.7	6.0	
S.174	NCM	yellow ticket no. 151		Wood	2003–9	Gold/silver alloy	0.6	7.0	
S.175	NCM	yellow ticket no. 83		Wood	2003–9	Gold/silver alloy	0.5	8.0	
S.176	NCM	yellow ticket no. 107		Wood	2003–9	Gold/silver alloy	0.5	6.0	
S.177	NCM	yellow ticket no. 88		Wood	2003–9	Gold/silver alloy	0.4	5.0	
S.178	NCM	yellow ticket no. 117		Wood	2003–9	Gold/silver alloy	0.4	9.0	
S.179	BM	1991,0409.16	ST/DT	Area 24	1991	?Lead alloy	110.2	52.0	
S.180	NCM	yellow ticket no. 246		Wood	2003–9	Copper alloy	61.8	43.6	
S.181	BM	1991,0409.21	ST/GZ	Area 21	1991	Copper alloy	55.6	40.5	
S.182	NCM	yellow ticket no. 266		Wood	2003–9	Copper alloy	52.4	31.0	10
S.183	NCM	yellow ticket no. 200		Wood	2003–9	Copper alloy	34.3	29.0	12
S.184	NCM	yellow ticket no. 265		Wood	2003–9	Copper alloy; ?lead alloy	31.5	32.5	
S.185	BM	1990,1101.46	SN/OE	Area 9; near Hoard L	1990	Copper alloy	31.4	37.8	
S.186	NCM	yellow ticket no. 193		Wood	2003–9	Copper alloy	25.5	26.8	2
S.187	BM	1990,1101.44	SN/MX	Area 9	1990	Copper alloy	19.6	31.0	

Table 14.2 continued

Cat. no.	Museum	Reg. no. or ticket no.	Site code	Findspot*	Discovery year	Material	Wt/g	L/mm (max.)	No. lumps (if multiple)
S.188	NCM	yellow ticket no. 252		Wood	2003–9	Copper alloy	18.7	27.0	
S.189	BM	1991,0409.9	ST/CA	Area 20	1991	?Lead; ?silver alloy	18.4	39.2	
S.190	BM	1991,0409.2	ST/AA	Area 20	1991	Copper alloy	15.8	40.0	
S.191	BM	1991,0409.10	ST/CC	Area 20	1991	?Lead; ?silver alloy	15.0	32.9	
S.192	NCM	yellow ticket no. 264		Wood	2003–9	Copper alloy	14.3	23.8	
S.193	NCM	yellow ticket no. 197		Wood	2003–9	Lead alloy	14.3	35.0	
S.194	BM	1991,0409.7	ST/BL	Area 19	1991	Copper alloy	13.3	27.9	
S.195	BM	1990,1101.39	SN/BD	Area 1	1990	Copper alloy	11.7	28.9	
S.196	BM	1990,1101.45	SN/MZ	Area 9	1990	Copper alloy	11.0	21.8	
S.197	BM	1991,0409.17	ST/DV	Area 24	1991	Copper alloy	9.6	22.1	
S.198	NCM	yellow ticket no. 190		Wood	2003–9	Copper alloy	9.1	25.0	
S.199	BM	1991,0409.26		Not recorded	1990–1	Copper alloy	8.6	17.2	
S.200	NCM	yellow ticket no. 182		Wood	2003–9	Copper alloy	8.0	20.0	
S.201	NCM	yellow ticket no. 161		Wood	2003–9	Copper alloy	7.5	26.0	
S.202	NCM	yellow ticket no. 162		Wood	2003–9	Copper alloy	6.7	20.0	
S.203	NCM	yellow ticket no. 132		Wood	2003–9	Copper alloy	6.5	20.0	
S.204	NCM	yellow ticket no. 263		Wood	2003–9	Copper alloy; ?lead alloy	6.2	24.0	
S.205	NCM	yellow ticket no. 181		Wood	2003–9	Copper alloy	5.5	17.0	
S.206	BM	1990,1101.41	SN/EN	Area 2	1990	Copper alloy	5.5	26.0	
S.207	NCM	yellow ticket no. 86		Wood	2003–9	Copper alloy	4.7	17.0	
S.208	NCM	yellow ticket no. 84		Wood	2003–9	Copper alloy	3.3	17.0	
S.209	BM	1991,0409.3	ST/AE	Area 16	1991	Copper alloy	3.3	17.2	
S.210	NCM	yellow ticket no. 53		Wood	2003–9	Copper alloy	3.1	14.0	
S.211	NCM	yellow ticket no. 159		Wood	2003–9	Copper alloy	3.0	16.0	
S.212	BM	1991,0409.14	ST/DF	Not recorded	1991	Copper alloy	2.7	14.6	
S.213	NCM	yellow ticket no. 46		Wood	2003–9	Copper alloy; ?lead alloy	2.7	15.0	
S.214	NCM	yellow ticket no. 48		Wood	2003–9	Copper alloy	2.6	11.0	
S.215	NCM	yellow ticket no. 163		Wood	2003–9	Copper alloy	2.6	20.0	
S.216	NCM	yellow ticket no. 170		Wood	2003–9	Copper alloy	2.6	14.0	
S.217	NCM	yellow ticket no. 165		Wood	2003–9	Copper alloy	2.5	12.0	
S.218	NCM	yellow ticket no. 185		Wood	2003–9	Copper alloy	2.5	16.0	
S.219	NCM	yellow ticket no. 58		Wood	2003–9	Copper alloy	2.4	11.0	
S.220	NCM	yellow ticket no. 260		Wood	2003–9	Copper alloy	2.0	12.5	

Table 14.2 continued

Cat. no.	Museum	Reg. no. or ticket no.	Site code	Findspot*	Discovery year	Material	Wt/g	L/mm (max.)	No. lumps (if multiple)
S.221	NCM	yellow ticket no. 147		Wood	2003–9	Copper alloy	1.9	18.0	
S.222	NCM	yellow ticket no. 262		Wood	2003–9	Copper alloy	1.9	15.1	
S.223	NCM	yellow ticket no. 55		Wood	2003–9	Copper alloy	1.8	10.0	
S.224	NCM	yellow ticket no. 160		Wood	2003–9	Copper alloy	1.5	12.0	
S.225	NCM	yellow ticket no. 96		Wood	2003–9	Copper alloy	1.4	12.0	
S.226	NCM	yellow ticket no. 176		Wood	2003–9	Copper alloy	1.4	11.0	
S.227	NCM	yellow ticket no. 54		Wood	2003–9	Copper alloy	1.2	12.0	
S.228	NCM	yellow ticket no. 146		Wood	2003–9	Copper alloy	1.1	12.0	
S.229	NCM	yellow ticket no. 111		Wood	2003–9	Copper alloy	1.0	11.0	
S.230	NCM	yellow ticket no. 102		Wood	2003–9	Copper alloy	0.8	10.0	
S.231	NCM	yellow ticket no. 57		Wood	2003–9	Copper alloy	0.7	9.0	
S.232	NCM	yellow ticket no. 59		Wood	2003–9	Copper alloy	0.7	7.0	
S.233	NCM	yellow ticket no. 177		Wood	2003–9	Copper alloy	0.6	7.0	
S.234	NCM	yellow ticket no. 49		Wood	2003–9	Iron	3.1	20.0	

Table 14.2 continued

S.238: NCM: yellow ticket no. 7
Circular copper alloy bead with moulded collar at each end, threaded onto a short length of corroded iron bar.
Wt: 7.7g; D(ext): 12.0mm (bead); L: 20.0mm (including protruding iron bar)

S.239: NCM: yellow ticket no. 9
Hollow, hemispherical copper alloy bead with large, central circular perforation.
Wt: 4.5g; D(ext): 12.0mm (bead); L: 8.0mm

S.240: Iron bead possibly from ?torc/?bracelet (Pl. 14.68)
NCM: yellow ticket no. 8
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Circular copper alloy bead with moulded collar at each end, threaded onto a short length of corroded iron bar. Probably from a beaded torc or bracelet.
Wt: 10.9g; D(ext): 20.0mm (bead); L: 12.0mm

S.241: Copper alloy ?bead possibly from ?torc/?bracelet (Pl. 14.68)
NCM: yellow ticket no. 5
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of unidentified copper alloy object. Rectangular in cross-section at one end, waisted in the centre to give a circular section, and then flaring out to a small square cross-section at the other end. A very short length of circular-section rod appears to emerge at the square end. The flat sides of the rectangular-section area appear to have been cut, or perhaps hammered. May be a component from a beaded torc or bracelet that has been cut up or deliberately damaged.
Wt: 7.1g; D(ext): 10.0mm (bead); L: 15.0mm

Brooches
Sophia Adams

Silver and copper alloys
S.242: ?Silver alloy brooch spring (Pl. 14.68)
NCM: yellow ticket no. 157
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small fragment of a brooch spring made from circular-section wire, possibly a silver alloy. Three coils and the external chord survive. Broken where the inner coil meets the bow, and at the start of the first coil on the opposite side of the spring.
Bilateral springs with external chords are a long-lasting feature of Iron Age brooches. Those with three or more coils on either side post-date *c.* 150 BC in England. The number of coils and the alloy suggest a date no earlier than *c.* 50 BC (Adams 2014; Adams 2020).
Wt: 4.6g; D(wire): 2.0mm; L: 24.0mm; W: 8.5mm (spring)

S.243: Copper alloy brooch (Pl. 14.68)
NCM: yellow ticket no. 11

S.235
S.236
S.237
S.238
S.239
S.240
S.241
S.242
S.243
S.244
S.245
S.246
S.247
S.248
S.249
S.250
S.251
S.252
S.253
S.254
S.255
S.256-7
S.258
S.259
S.260
S.261
S.262
S.263
S.264
S.265
0
5
10cm

Plate 14.68

Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy catch-plate and foot from a Middle Iron Age bow brooch. The reverted, sloped foot terminates in a dished, circular plate and a collar wrapped around the hip of the bow. The plate may originally have been inlaid with coral or glass. Very little of the plano-convex-section bow survives.
The shape, angle and attachment of the foot place this in Hull and Hawkes' Type 2Aa (1987) as further defined by Adams (2014) dating to *c.* 350–150 BC.
Wt: 8.1g; L: 38.0mm; W: 15.0mm (max.); T: 2.5mm (bow)

S.244: Copper alloy brooch (Pl. 14.68)
BM: 1992,0210.4; Site code: SA/BL
Findspot: Trench 6
Context details: Enclosure ditch: SA6/2, Section C, Layer 1
Copper alloy brooch with high arched, rectangular-section bow and long, wide catch-plate. The pin and spring are missing. The upper surface of the bow is decorated with a double row of punched dots. The foot is broken.
Although the high arched bow is often associated with Early Iron Age brooches it reappears during the later Iron Age combined with different foot and head forms. The cross-section of the early examples is circular or plano-convex, whereas the straight sides and rectangular cross-section of this example is more akin to later Iron Age brooches, as is the long catch-plate found on the reverted, attached foot forms of the 3B brooches. This could be an atypical variation on Hull and Hawkes' Type 1B brooches of 400–300 BC date but a post-150 BC date is also possible (Hull and Hawkes 1987; Mackreth 2011; Adams 2014).
Wt: 1.9g; L: 34.0mm; W: 2.9mm

S.245: Tinned copper alloy brooch (Pl. 14.68)
NCM: yellow ticket no. 267
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy Romano-British Almgren Type 101 brooch with white metal coating to the surface (tinning). Rounded trumpet-shaped head and fantail foot with perpendicular, semi-circular plate projecting from the centre of the brooch. Decoration (and tinning) is visible over these front features albeit in a worn condition: round dots on the upper part and across the top face of the plate. The fantail bears two, barely visible, small human faces in relief, one above the other. The sprung pin is mounted on the back of the brooch and rests in a triangular catch-plate.

A very close parallel is Mackreth's Almgren 101.1b brooch from Bottom Pond Farm, Owslebury 5550, pl. 133, *c.* AD 150–220 (Mackreth 2011, 192–3, pl. 133).
Wt: 6.2g; L: 30.5mm; W: 12.2mm (at head); T: 15.0mm (depth of whole brooch)

Other personal ornaments and fasteners

Copper alloy
S.246: Copper alloy strip/?brooch (Pl. 14.68)
BM: 1992,0210.5; Site code: SA/DV
Findspot: Trench 6
Context details: Ditch: SA6/7
Copper alloy rectangular-section strip, broken at both ends, with slight curve near one end. Possibly the pin from a penannular brooch or a buckle.
Wt: 0.2g; L: 20.0mm; W: 2.3mm; T: 1.0mm

S.247: Copper alloy finger-ring (Pl. 14.68)
BM: 1991,0409.15; Site code: ST/DG
Findspot: Not recorded
Context details: Metal-detected stray find from 1991 excavation, most likely from 1990 backfill.
Half of a large Roman finger-ring, with swollen recessed bezel in the centre. Missing the setting.
Henig Type II–III/Guiraud 2, AD 200–400 (Johns 1996, 42–4).
Wt: 5.9g; D(ext): 26.5mm; W: 14.1mm; T: 4.4mm

S.248: Copper alloy (and ?glass) ?finger-ring (Pl. 14.68)
BM: 1991,0409.19; Site code: ST/FO
Findspot: Area 26
Context details: Metal-detected stray find from 1991 excavation.
Heavily corroded finger-ring fragment, consisting of the area around the bezel, set with some blueish glass or enamel, poorly preserved. Possibly Roman in date.
Wt: 1.1g; L: 11.8mm; W: 7.4mm

S.249–52: Copper alloy buttons/fasteners (Pl. 14.68)
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Four copper alloy buttons or fasteners, each comprising a shallow, hollow copper alloy dome, with bar on the underside. All four are near-identical and may be from the same object.

S.249: NCM: yellow ticket no. 17
Wt: 0.9g; D(ext): 10.0mm (head); T: 4.0mm

S.250: NCM: yellow ticket no. 16
Wt: 0.8g; D(ext): 10.0mm (head); T: 4.0mm

S.251: NCM: yellow ticket no. 18
Wt: 0.7g; D(ext): 10.0mm (head); T: 4.0mm

S.252: NCM: yellow ticket no. 19
Wt: 0.8g; D(ext): 10.0mm (head); T: 4.0mm

Fittings, mounts and strap fittings

Copper alloy and iron
S.253–4: Pair of zoomorphic copper alloy ?drinking horn terminals (Pl. 14.68)
Findspot: Trench 15, to east of main excavated area
Context details: Metal-detected stray finds 1989.
Two cast copper alloy conical terminals, each with a hollow internal socket and an end terminating in a loop in the form of a duck's head (or the head of a long-snouted animal) (see **Fig. 21.42**). The animal heads are sharply modelled in the

round and were cast by the lost-wax method. Possibly from drinking horns.

Such objects are rare, but cf. the bull-headed horn terminal from Needham, Norfolk, published by Davies (2011, 63–4).
See Chapter 21 for a full discussion of these objects.

S.253: BM: 1993,0201.1
Wt: 73.9g; D(ext): 29.5mm (base); L: 50.6mm

S.254: BM: 1993,0201.2
Wt: 51.4g; L: 50.0mm

S.255: Copper alloy linch-pin/fitting (Pl. 14.68)
BM: 1991,0409.24; Site code: ST/HX
Findspot: Not recorded
Context details: Metal-detected stray find from 1991 excavation.
Balustered copper alloy terminal with plain flat top and simple recessed line around circumference of the head. The form is very similar to vase-headed linch-pin terminals, cf. Palk (1992) Type IIA, nos 570–91, common from the later Iron Age to the Early Roman period. A copper alloy rivet runs across the socket, and some preserved wood remains in the interior. This suggests it may be a terminal fitted to a wooden rod rather than a linch-pin, which would be expected to have an iron (rather than wooden) shaft.
Wt: 33.9g; D(ext): 20.3mm; L: 27.4mm

S.256–7: Copper alloy terret (Pl. 14.68)
BM: 1991,0409.8; Site code: ST/BR; ST/BS
Findspot: Area 20
Context details: Metal-detected stray find from 1991 excavation.
Two broken fragments from a copper alloy terret ring, comprising most of the ring, although none of the strap bar is preserved. Very heavily corroded, and the break is clearly not recent. Three equally spaced sub-rectangular projections around the outer circumference, each flanked on either side by a slightly raised margin.
cf. Lewis's (2015, 91–5) 'terrets with triple projections' type, especially the 'triplets' sub-type (fig. 4.1(xiv)). Lewis dates this type to the mid-1st to 2nd centuries AD.
Wt: 26.9g (total); L: 49.1mm (max.)

S.258: Copper alloy and iron fitting (Pl. 14.68)
BM: 1991,0409.11; Site code: ST/CE
Findspot: Not recorded
Context details: Metal-detected stray find from 1991 excavation.
Very unusual copper alloy mount or fitting. The overall shape in plan is a capital 'I', where the vertical stem takes the form of a hollow sub-rectangular dome, swollen in the centre, and the top and bottom bars are projecting circular-section 'legs', each ending in a small spherical knob. The top of the central dome is decorated with a simple grid pattern in low relief. On the reverse, a corroded iron rivet would once have fixed the mount to a larger object, most likely organic.
Wt: 19.0g; L: 50.0mm; W: 32.7mm; T: 11.0mm

S.259: Copper alloy fitting (Pl. 14.68)
BM: 1990,1101.47; Site code: SN/PZ
Findspot: Area 11
Context details: Metal-detected stray find from 1990 excavation.
Small copper alloy ring with short broken-off length of shank, heavily corroded. Most likely part of a button and loop fastener. cf. Wild (1970), most similar to mid-1st-century AD examples, such as those from the Stanwick Hoard, e.g. MacGregor (1962) M.26–36.
Wt: 2.3g; L: 21.5mm; W: 12.8mm; T: 4.2mm

S.260: Copper alloy fitting (Pl. 14.68)
NCM: yellow ticket no. 139
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy fitting: small ring with a flat, projecting tang or shank or on one side.
Wt: 4.7g; D(ext): 14.0mm; L: 22.5mm; T: 7.5mm

S.261: Copper alloy rod/?strap fitting (Pl. 14.68)
NCM: yellow ticket no. 254
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Curved fragment of circular-section copper alloy rod, broken at both ends and heavily corroded. Possibly part of a strap fitting.
Wt: 8.5g; D(ext): 8.8mm; L: 25.0mm

S.262: Copper alloy ?strap fitting (Pl. 14.68)
NCM: yellow ticket no. 188
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Broken fragment of copper alloy object, perhaps part of a strap fitting. Curved in plan, flat on one side, with shallow triangular cross-section.
Wt: 2.6g; L: 22.0mm; W: 8.3mm; T: 3.0mm

S.263: Copper alloy strip/?strap fitting (Pl. 14.68)
NCM: yellow ticket no. 240
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.

Curved fragment of U-shaped copper alloy strip, broken at both ends. Too shallow for a binding strip; possibly from the outer plating or sheath of a ring or harness/strap fitting.

Wt: 0.8g; L: 22.5mm; W: 9.5mm; T: 0.2mm (sheet); 5.5mm (total)

S.264: Copper alloy and iron strap fitting (Pl. 14.68)
NCM: yellow ticket no. 39
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small fragment of broken iron ring with oval cross-section; copper alloy sheet sheath on exterior face.
Wt: 2.8g; L: 23.6mm; W: 8.0mm; T: 6.5mm

S.265: Copper alloy and iron strap fitting (Pl. 14.68)
NCM: yellow ticket no. 26
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of broken iron ring with circular cross-section; remains of copper alloy sheet sheath on exterior face.
Wt: 10.8g; L: 20.0mm; W: 19.0mm; T: 12.0mm

S.266: Copper alloy and iron sheet/?ring with rivets (Pl. 14.69)
NCM: yellow ticket no. 241
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of thick iron sheet, or possibly part of the circuit of a small iron ring, heavily corroded. Pierced through by two circular-headed copper alloy rivets.
Wt: 2.5g; D(ext): 3.5mm (rivet heads); L: 20.5mm; W: 14.3mm; T: 6.2mm

Rivets and rivet heads

Copper alloy

S.267: Copper alloy mount/rivet (Pl. 14.69)
NCM: yellow ticket no. 168
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
S-shaped, raised copper alloy mount or rivet with single, square-section attachment pin at rear.
Wt: 1.8g; L: 20.0mm (mount); 10.0mm (pin); W: 11.0mm; T: 2.0mm (mount)

S.268: Copper alloy rivet (Pl. 14.69)
NCM: yellow ticket no. 20
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Solid, domed copper alloy rivet head or terminal, with projecting circular-section shank. Incised decorative border around edge of domed head.
Wt: 5.8g; D(ext): 10.0mm (head); L: 17.0mm; W: 3.8mm (shank)

S.269: Copper alloy rivet head (Pl. 14.69)
NCM: yellow ticket no. 43
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Solid, domed copper alloy rivet head with slightly projecting circular-section shank.
Wt: 2.8g; D(ext): 9.6mm (head); L: 7.0mm (total height, including shank); W: 2.8mm (shank); T: 6.0mm (head)

S.270: Copper alloy rivet head (Pl. 14.69)
NCM: yellow ticket no. 24
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Shallow, hollow copper alloy domed rivet head, with central projecting shank on the reverse.
Wt: 1.8g; D(ext): 11.0mm (head); L: 5.3mm; W: 3.0mm (pin); T: 2.8mm (height of head)

S.271: Copper alloy rivet (Pl. 14.69)
NCM: yellow ticket no. 201
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy rivet with round, flat head and protruding circular-section shank.
Wt: 1.1g; D(ext): 10.5mm (head); L: 10.0mm; W: 2.0mm (shank)

S.272: Copper alloy rivet head (Pl. 14.69)
NCM: yellow ticket no. 23
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Shallow, hollow copper alloy domed rivet head, with central projecting shank on the reverse.
Wt: 0.9g; D(ext): 9.0mm (head); L: 12.3mm; W: 1.0mm (pin); T: 4.0mm (height of head)

S.273: Copper alloy rivet head (Pl. 14.69)
NCM: yellow ticket no. 22
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Shallow, hollow copper alloy domed rivet head, with central circular perforation.
Wt: 0.5g; D(ext): 12.0mm (head); T: 3.8mm (height of head)

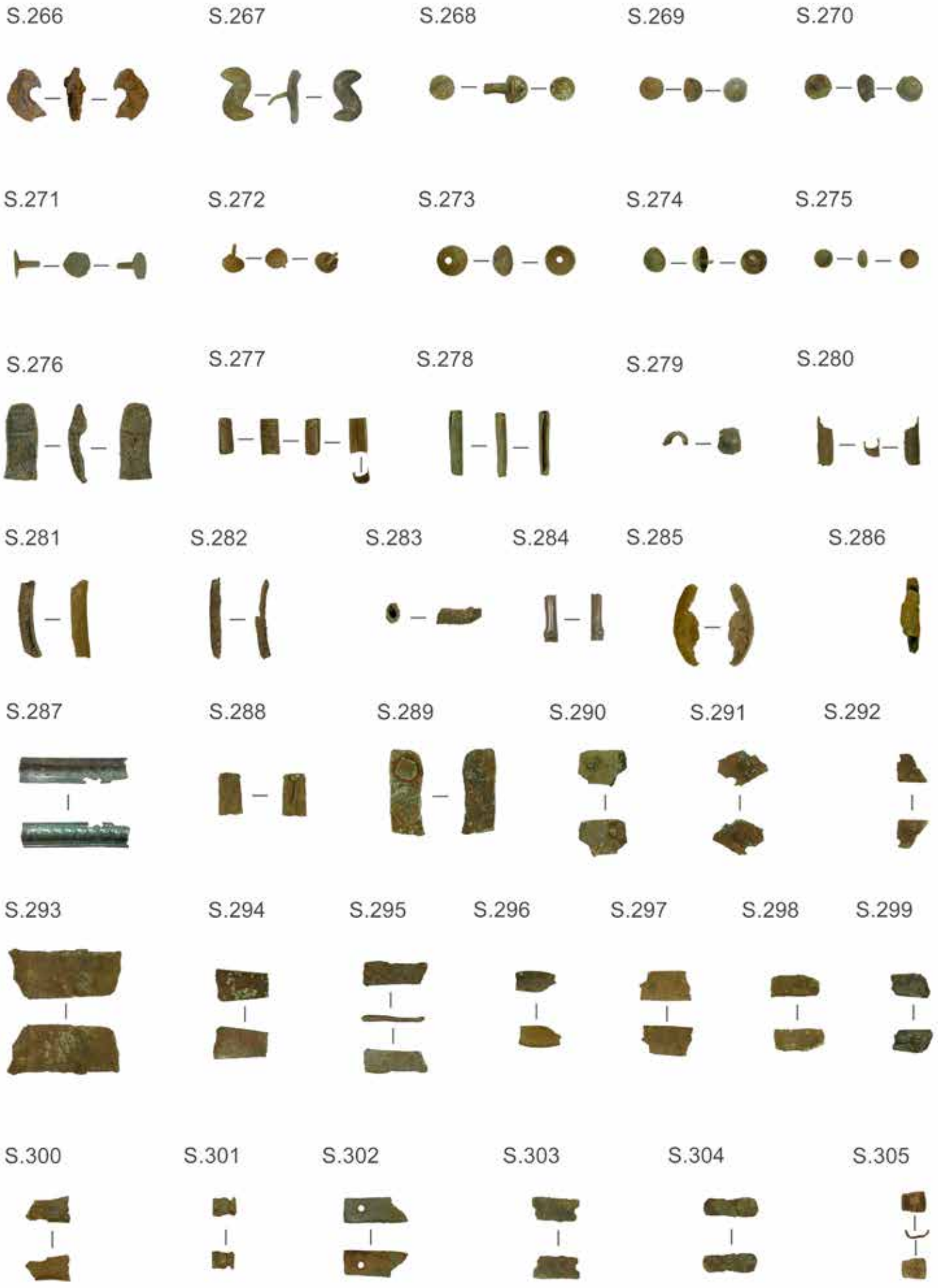
S.274: Copper alloy rivet head (Pl. 14.69)
NCM: yellow ticket no. 25
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Shallow, hollow copper alloy domed rivet head, with central projecting shank on the reverse.
Wt: 0.5g; D(ext): 10.0mm (head); L: 6.9mm; W: 1.0mm (pin); T: 3.8mm (height of head)

S.275: Copper alloy rivet head (Pl. 14.69)
NCM: yellow ticket no. 257
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small convex copper alloy dome, most likely a rivet head.
Wt: 0.2g; D(ext): 7.2mm; T: 1.7mm

Binding strips

Copper alloy

S.276: Copper alloy binding strip/?shield (Pl. 14.69)
NCM: yellow ticket no. 33
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Bulbous terminal from a U-shaped copper alloy binding strip, broken at the other end. Probably one half of the terminal of the V-shaped corner of a hide-shaped shield binding.
Similar to the hide-shaped shield binding from Hoard B/C: B/C.89.
Wt: 1.7g; L: 30.0mm; W: 12.0mm; T: 4.2mm (total); *c.* 0.3mm (sheet)


S.266
S.267
S.268
S.269
S.270
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S.277
S.278
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S.293
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S.298
S.299
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S.301
S.302
S.303
S.304
S.305
0
5
10cm

Plate 14.69

S.277: Copper alloy binding clamp (Pl. 14.69)
NCM: yellow ticket no. 244
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
U-shaped copper alloy binding clamp. Decorated on the exterior with incised transverse lines forming opposing curves that meet back-to-back in the centre of the clamp.
Wt: 1.2g; L: 14.5mm; W: 7.5mm; T: 0.3–0.5mm (sheet); 5.2mm (total)

S.278: Copper alloy ?binding clamp (Pl. 14.69)
NCM: yellow ticket no. 27
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short length of U-shaped copper alloy binding strip, squeezed almost closed. Perhaps a clamp as the terminals seem original, with simple incised decoration at each end.
Wt: 1.7g; L: 25.0mm; W: 4.2mm; T: 3.8mm

S.279: Copper alloy ?binding clamp (Pl. 14.69)
NCM: yellow ticket no. 40
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy fragment. Possible clamp from binding strip or fragment of bead.
Wt: 1.4g; D(ext): 10.0mm; W: 9.2mm; T: 2.0mm

S.280: Copper alloy binding strip (Pl. 14.69)
NCM: yellow ticket no. 186
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of U-shaped copper alloy binding strip, broken at both ends.
Wt: 4.7g; L: 19.0mm; W: 6.0mm; T: 4.0mm

S.281: Copper alloy binding strip (Pl. 14.69)
NCM: yellow ticket no. 169
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of U-shaped copper alloy binding strip, broken at both ends.
Wt: 2.5g; D(ext): 8.0mm; L: 34.0mm; W: 8.0mm; T: 5.0mm

S.282: Copper alloy binding strip (Pl. 14.69)
NCM: yellow ticket no. 178
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Crushed fragment of U-shaped copper alloy binding strip
Wt: 1.3g; L: 31.0mm; W: 5.0mm; T: 3.1mm

S.283: Copper alloy binding strip (Pl. 14.69)
NCM: yellow ticket no. 256
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Length of U-shaped copper alloy binding strip, broken at both ends. Edges pinched together to form a narrow tube. Heavily corroded
Wt: 1.0g; L: 17.5mm; W: 6.0mm; T: 5.5mm

S.284: Copper alloy binding strip (Pl. 14.69)
NCM: yellow ticket no. 127
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of U-shaped copper alloy binding strip, cut or broken at both ends.
Wt: 0.4g; L: 18.0mm; W: 4.0mm; T: 3.0mm

S.285: Copper alloy ?binding strip (Pl. 14.69)
NCM: yellow ticket no. 189
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Broken fragment of copper alloy sheet, possibly part of a U-shaped binding strip.
Wt: 1.5g; L: 32.0mm; W: 10.0mm; T: 0.3mm (sheet); 3.0mm (total)

S.286: Copper alloy ?binding strip (Pl. 14.69)
BM: 1992,0210.6; Site code: SA/GM
Findspot: Trench 7
Context details: Ditch: SA7/5, Section D
Crushed fragment of U-shaped copper alloy binding strip, broken and heavily eroded at the edges.
Wt: 0.4g; L: 29.4mm; W: 1.2mm; T: 0.5mm

Strip

Copper alloy
S.287: Copper alloy decorative strip
BM: 1991,0409.20; Site code: ST/GM
Findspot: Area 27
Context details: Metal-detected stray find from 1991 excavation.
Copper alloy decorative strip with raised central rib, broken at both ends. The long flat sides are decorated with punched geometric decoration and the convex centre has less legible decoration.
Wt: 1.8g; L: 42.6mm; W: 10.0mm; T: 1.9mm

S.288: Copper alloy strip with ?rivet and adhering ?wire (Pl. 14.69)
NCM: yellow ticket no. 218
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends. Pierced through by a small circular-headed rivet at one end. Adhering copper alloy wire fragment running down centre of strip.
Wt: 0.6g; L: 16.8mm; W: 9.0mm; T: 0.2–0.5mm (sheet); 1.5mm (rivet)

S.289: Copper alloy strip with rivet (Pl. 14.69)
NCM: yellow ticket no. 255
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at one end, and possibly both. Pierced through by a large-headed rivet, the head broken at the edges.
Wt: 3.3g; L: 33.5mm; W: 13.0mm; T: 0.8mm (strip), 1.8mm (including rivet)

S.290: Copper alloy strip with rivet (Pl. 14.69)
NCM: yellow ticket no. 212
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends. Pierced through by one small circular-headed rivet.
Wt: 1.0g; L: 18.8mm; W: 13.8mm; T: 0.2mm

S.291: Copper alloy strip with rivet (Pl. 14.69)
NCM: yellow ticket no. 213
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends. Pierced through by one small circular-headed rivet.
Wt: 0.7g; L: 19.5mm; W: 13.6mm; T: 0.2mm

S.292: Copper alloy strip with rivet (Pl. 14.69)
NCM: yellow ticket no. 217
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends. Pierced through by one small circular-headed rivet.
Wt: 0.5g; D(ext): 4.0mm (rivet head); L: 15.0mm; W: 14.0mm; T: 0.2mm (sheet); 1.8mm (rivet)

S.293: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 205
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends.
Wt: 2.5g; L: 43.0mm; W: 17.8mm; T: 0.5mm

S.294: Copper alloy strip ?with rivet (Pl. 14.69)
NCM: yellow ticket no. 208
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends, slightly tapered. Possible remains of one small circular-headed rivet.
Wt: 2.5g; L: 23.0mm; W: 13.4mm; T: 1.0mm

S.295: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 167B
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, rectangular length of copper alloy strip, broken at both ends.
Wt: 1.8g; L: 25.3mm; W: 9.5mm; T: 0.8mm

S.296: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 235
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of thick copper alloy strip, slightly convex, and broken at both ends. Broken across a possible rivet hole at one end.
Wt: 1.1g; L: 16.2mm; W: 8.8mm; T: 1.0–1.5mm (sheet); 3.0mm (total)

S.297: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 209
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends. Possible remains of the shank of one small rivet, where it pierced through the strip.
Wt: 1.0g; L: 20.0mm; W: 10.5mm; T: 0.5mm

S.298: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 184
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of thin copper alloy strip, broken at both ends.
Wt: 0.6g; L: 19.0mm; W: 8.0mm; T: 0.2mm

S.299: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 214
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, slightly tapered, and broken at both ends. Formed from a rolled/folded piece of copper alloy sheet.
Wt: 0.6g; L: 16.8mm; W: 10.0mm; T: 1.6mm

S.300: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 219
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken at both ends, slightly curved in cross-section.
Wt: 0.6g; L: 18.3mm; W: 10.5mm; T: 0.2–0.5mm (sheet); 2.8mm (total)

S.301: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 233
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short length of copper alloy strip, broken at both ends. Formed from a rolled/folded piece of copper alloy sheet.
Wt: 0.5g; L: 10.5mm; W: 8.5mm; T: 0.2mm (sheet); 1.8mm (total)

S.302: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 167A
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short, rectangular length of copper alloy strip, broken at both ends and perforated with small circular rivet hole.
Wt: 0.4g; L: 25.0mm; W: 10.5mm; T: 0.3mm

S.303: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 222
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, broken across a large circular (?rivet) hole at both ends.
Wt: 0.4g; L: 18.5mm; W: 9.5mm; T: 0.2mm

S.304: Copper alloy strip (Pl. 14.69)
NCM: yellow ticket no. 236

Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy strip, either very short strip or broken at both ends, but heavily worn along all edges.
Wt: 0.3g; L: 21.0mm; W: 7.6mm; T: 0.2mm

S.305: Copper alloy (?lead alloy) strip (Pl. 14.69)
NCM: yellow ticket no. 239
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of shallow U-shaped copper alloy strip, broken at both ends. Tinned or leaded surface on one side.
Wt: 0.4g; L: 11.0mm; W: 9.5mm; T: 0.5mm

S.306: Copper alloy strip (Pl. 14.70)
NCM: yellow ticket no. 187
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of thin copper alloy strip. One original end, pierced with a circular rivet hole; broken at the other end.
Wt: 1.3g; L: 35.0mm; W: 15.0mm; T: 0.3mm

Iron
S.307: Iron strip (Pl. 14.70)
NCM: yellow ticket no. 45
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Short fragment of iron strip with rectangular cross-section, broken at both ends.
Wt: 1.2g; L: 17.0mm; W: 7.0mm; T: 2.0mm

Sheet fragments with original edges or other distinguishing features

Copper alloy
S.308: Copper alloy sheet with rivet(s) (Pl. 14.70)
NCM: yellow ticket no. 207
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy sheet fragment with no original edges, torn and irregular in shape, pierced by one small circular-headed rivet, and possibly a second, though this area is obscured by corrosion.
Wt: 1.2g; L: 22.8mm; W: 13.0mm; T: 0.3mm

S.309: Copper alloy sheet with rivet (Pl. 14.70)
NCM: yellow ticket no. 215
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small, bent, copper alloy sheet fragment. One possible original edge, other edges torn and irregular. Possible remains of the shank of one small rivet, where it pierced through the strip.
Wt: 1.1g; L: 20.5mm; W: 15.5mm; T: 0.2–0.5mm

S.310: Copper alloy sheet with rivet (Pl. 14.70)
NCM: yellow ticket no. 206
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy sheet fragment with one possible original straight edge, other edges torn, pierced by a large circular-headed rivet.
Wt: 1.0g; D(ext): 7.0mm (rivet head); L: 27.0mm; W: 12.5mm; T: 0.2mm

S.311: Copper alloy sheet with rivets (Pl. 14.70)
NCM: yellow ticket no. 228
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Three layers of copper alloy sheet riveted together with two small circular-headed rivets. The sheet fragments are torn and irregular. One of the rivets pierces only two of the three layers.
Wt: 1.0g; D(ext): 3.5mm (rivet heads); L: 16.5mm; W: 13.5mm; T: 0.2mm (sheet); 3.0mm (total)

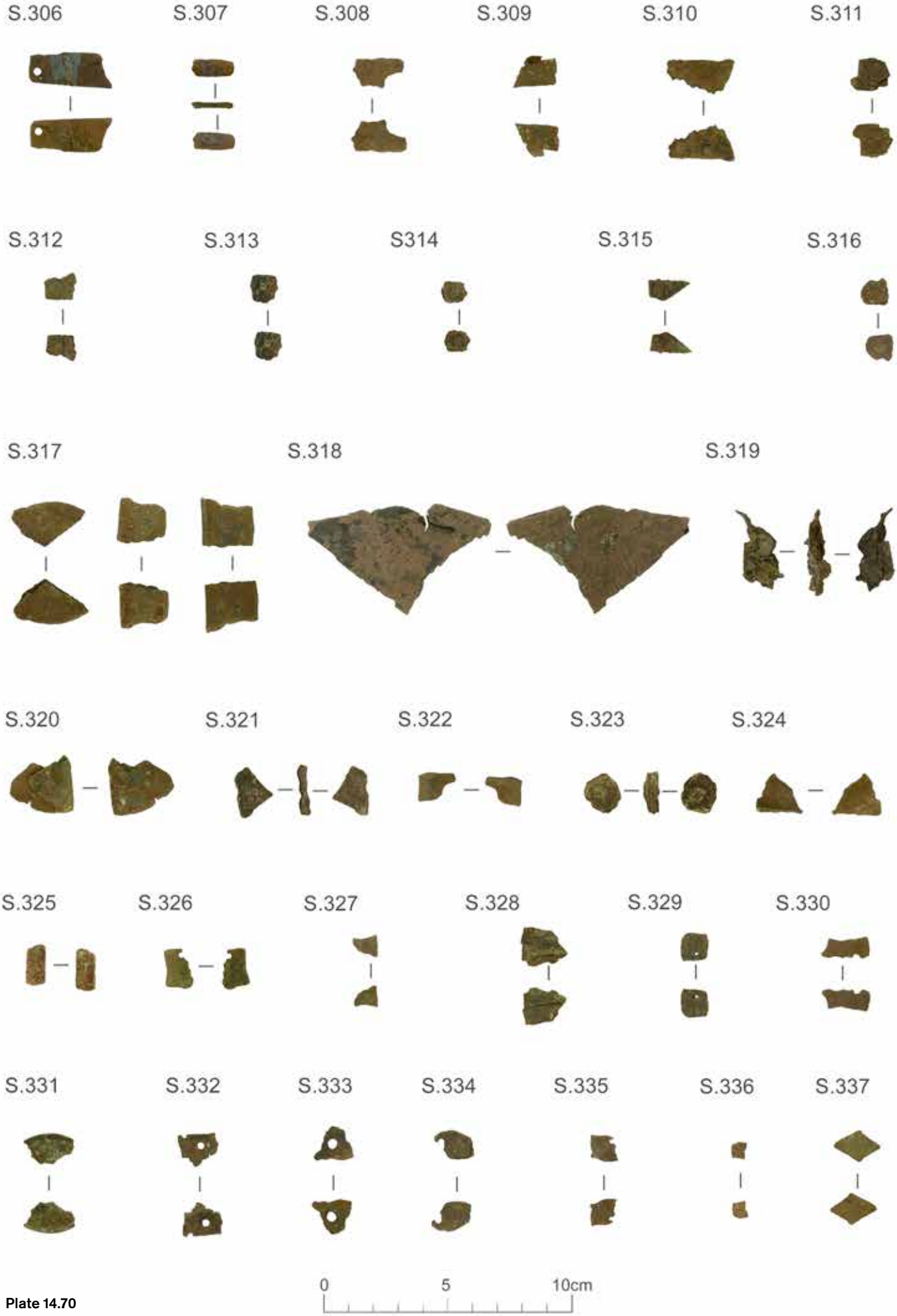
S.312: Copper alloy sheet with rivets (Pl. 14.70)
NCM: yellow ticket no. 210
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy sheet object fragment, formed from two layers of sheet sandwiched together, one possible original edge, other edges torn and irregular. Pierced through by three small circular-headed rivets.
Wt: 0.9g; L: 15.0mm; W: 13.5mm; T: 1.8mm

S.313: Copper alloy sheet with rivet (Pl. 14.70)
NCM: yellow ticket no. 221
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Three layers of copper alloy sheet riveted together with a small circular-headed rivet. The centre layer has no original edges, the outer layers are both small, square plates, possibly to reinforce the rivet.
Wt: 0.8g; L: 12.8mm; W: 12.0mm; T: 0.2mm (sheet); 3.0mm (total)

S.314: Copper alloy sheet with rivet (Pl. 14.70)
NCM: yellow ticket no. 230
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Three layers of copper alloy sheet riveted together with a circular-headed rivet. The centre layer has no original edges, the outer layers are both small, square plates, possibly to reinforce the rivet.
Wt: 0.7g; D(ext): 4.5mm (rivet head); L: 10.8mm; W: 9.5mm; T: 0.2mm (sheet); 1.8mm (total)

S.315: Copper alloy sheet with rivet (Pl. 14.70)
NCM: yellow ticket no. 216
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small, roughly triangular, fragment of copper alloy sheet with one possible original straight edge, other edges broken. Pierced through by one circular-headed rivet.
Wt: 0.5g; D(ext): 6.0mm (rivet head); L: 17.0mm; W: 8.8mm; T: 0.2mm

S.316: Copper alloy; ?iron sheet with rivet (Pl. 14.70)
NCM: yellow ticket no. 224


S.306
S.307
S.308
S.309
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S.318
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S.329
S.330
S.331
S.332
S.333
S.334
S.335
S.336
S.337
0
5
10cm

Plate 14.70

Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy sheet with no original edges, fixed to a second (?iron) sheet layer by a large circular-headed rivet.
Wt: 1.1g; D(ext): 9.0mm (rivet head); L: 12.3mm; W: 12.0mm; T: 2.3mm

S.317: Copper alloy (thick) sheet (Pl. 14.70)
NCM: yellow ticket no. 202
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Three fragments of thick copper alloy sheet. Two appear to be short lengths from strips or bars. The other is triangular in plan, with one original curved edge and two torn or broken straight edges.
Wt: 28.7g (total); L: 21.4mm (max.)

S.318: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 204
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy sheet fragment, triangular in plan. No original edges, although a short length of copper alloy strip is attached (possibly riveted) along part of one edge, suggesting it comes from a larger multi-component object, such as a vessel.
Wt: 7.3g; L: 74.0mm; W: 43.5mm; T: 0.5mm (sheet); 2.0mm (overlapping section)

S.319: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 133
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy sheet fragment with irregular edges, heavily folded and possibly partially melted.
Wt: 5.9g; L: 35.0mm; W: 17.0mm

S.320: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 253
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small, folded copper alloy sheet object fragment, with one original (though damaged) curved edge and other edges torn. The fragment is slightly dished, and may have come from a small circular object such as a spoon bowl or scale pan.
Wt: 5.3g; L: 27.0mm; W: 24.0mm; T: 3.5mm (folded)

S.321: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 259
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of thick, corroded, copper alloy sheet. Corrugated cross-section. One possible original edge, other edges torn. Approximately trapezoidal in plan.
Wt: 3.1g; L: 19.5mm; W: 20.5mm

S.322: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 171
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Thick fragment of broken copper alloy sheet, flat on one side, slightly convex on the other.
Wt: 3.0g; L: 18.0mm; W: 12.0mm; T: 3.0mm

S.323: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 203
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment comprising three layers of thin copper alloy sheet riveted together.
Wt: 2.5g; L: 17.0mm; W: 12.0mm; T: 5.0mm

S.324: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 242
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Thick, slightly bent, roughly triangular, copper alloy sheet fragment, all sides broken.
Wt: 2.0g; L: 20.0mm; W: 17.0mm; T: 1.5mm

S.325: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 237
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of thick copper alloy sheet or strip, rectangular in plan with at least one original straight edge. Tinned or leaded surface on both sides.
Wt: 1.3g; L: 17.2mm; W: 8.5mm; T: 2.0mm

S.326: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 231
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of thick copper alloy sheet with at least one original, slightly curved, edge. Other edges broken. In one area, the edge break falls across a circular rivet hole.
Wt: 1.2g; L: 17.8mm; W: 12.5mm; T: 1.5mm

S.327: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 164B
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Thick, flat fragment of copper alloy sheet, roughly triangular in plan. Two broken edges, and one concave-curved original, thickened edge.
Wt: 1.1g; L: 12.0mm; W: 10.0mm; T: 1.6mm

S.328: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 220
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy sheet object fragment with one possible original straight edge, other edges torn. Remains of part of a curved triangular or trumpet motif in repoussé.
Wt: 0.9g; L: 19.3mm; W: 15.5mm; T: 0.5mm (sheet); 1.6mm (total)

S.329: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 223
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small, square copper alloy sheet fragment. Two or three original edges, possibly the terminal of a length of copper alloy strip. Pierced through near one edge with a small, circular rivet hole.
Wt: 0.7g; L: 14.0mm; W: 13.5mm; T: 0.2–0.5mm

S.330: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 179
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of thin copper alloy sheet with no original edges. Broken across a rivet hole at one point.
Wt: 0.5g; L: 20.0mm; W: 9.0mm; T: 0.5mm

S.331: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 211
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small copper alloy sheet object fragment, roughly triangular in plan, with one original curved edge and two torn straight edges. The fragment is slightly dished, and may have come from a small circular object such as a spoon bowl or scale pan.
Wt: 0.5g; L: 20.5mm; W: 12.4mm; T: 0.3mm

S.332: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 227
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Bent and broken fragment of copper alloy sheet with one original straight edge and other edges torn and irregular. One complete and one torn circular rivet hole.
Wt: 0.5g; L: 17.0mm; W: 14.4mm; T: 0.2mm

S.333: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 229
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small, roughly triangular fragment of copper alloy sheet, all edges torn. Pierced through just off-centre by a circular rivet hole.
Wt: 0.5g; D(ext): 4.0mm (rivet hole); L: 16.0mm; W: 15.2mm; T: 0.2mm

S.334: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 232
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy sheet, irregular in form, with no original edges, highly polished on one side. In one area, the edge break falls across a circular rivet hole.
Wt: 0.5g; L: 17.4mm; W: 11.2mm; T: 0.4mm

S.335: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 225
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Copper alloy sheet fragment with one original curved edge with small (?decorative) projection, and two straight torn edges. One torn edge runs across a small circular rivet hole.
Wt: 0.4g; L: 14.9mm; W: 11.5mm; T: 0.2–0.5mm

S.336: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 234
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of copper alloy sheet, irregular in form, with areas of possible curved original edge. Suggestion of relief decoration on one side.
Wt: 0.4g; L: 8.0mm; W: 7.4mm; T: 1.0mm

S.337: Copper alloy sheet (Pl. 14.70)
NCM: yellow ticket no. 238
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small kite-shaped piece of copper alloy sheet, all edges seemingly original, with incised line around edge.
Wt: 0.4g; L: 18.5mm; W: 13.0mm; T: 0.2mm

S.338: Copper alloy sheet (Pl. 14.71)
NCM: yellow ticket no. 174
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragments of thin copper alloy sheet. Torn, with one possible original edge. In the centre, the remains of what may be a rivet.
Wt: 0.3g; L: 11.0mm; W: 10.0mm; T: 0.3mm

S.339: Copper alloy sheet (Pl. 14.71)
NCM: yellow ticket no. 226
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Small, clipped rectangle of copper alloy sheet. Pierced through just off-centre by a circular rivet hole.
Wt: 0.2g; L: 11.4mm; W: 8.0mm; T: 0.2mm

S.340–S.351: Sheet fragments with no original edges or diagnostic features (copper alloy) **(Table 14.3)**
Possibly from vessels or mounts. None could be associated with the helmet F.445.

All were metal-detected stray finds, some made during the 1990s excavation seasons, others made in 2003–9. Groupings made by the finder were kept, hence some catalogue numbers for 2003–9 finds include multiple fragments.

The finds are ordered by weight. For multiple groups, the weight given is the total, and the length is the maximum dimension of the largest fragment.

Tools and implements

Iron and copper alloy
S.352: Iron knife (Pl. 14.71)
BM: 1991,0409.23; Site code: ST/HV
Findspot: Area 21
Context details: Metal-detected stray find from 1991 excavation.

Cat. no.	Museum	Reg. no. or Ticket no.	Site code	Findspot*	Discovery year	Wt/g	L/mm (max.)	T/mm	No. fragments (if multiple)
S.340	NCM	yellow ticket no. 166		Wood	2003–9	7.1	23	0.3	14
S.341	NCM	yellow ticket no. 199		Wood	2003–9	4.1	19	0.2–3	19
S.342	NCM	yellow ticket no. 194		Wood	2003–9	2.7	23	0.3	3
S.343	NCM	yellow ticket no. 196		Wood	2003–9	2.5	29		3
S.344	NCM	yellow ticket no. 164A		Wood	2003–9	1.3	21	0.3	4
S.345	BM	1990,1101.40	SN/EF	Area 2	1990	1.3	35.2	0.3	
S.346	NCM	yellow ticket no. 172		Wood	2003–9	1.1	24	0.2	2
S.347	NCM	yellow ticket no. 180		Wood	2003–9	0.6	25	0.2	2
S.348	BM	1991,0409.25		Area 21	1991	0.5	17.4	0.8	
S.349	NCM	yellow ticket no. 119		Wood	2003–9	0.2	9	1	
S.350	NCM	yellow ticket no. 76		Wood	2003–9	0.1	30	0.8	
S.351	NCM	yellow ticket no. 191		Wood	2003–9	0.1	14	0.2	

Table 14.3 Tabulated catalogue entries for copper alloy sheet fragments with no original edges or diagnostic features. None are illustrated
* = 'Wood' denotes the wooded area to the west of the main site

Simple tanged iron knife with flat back and heavily corroded blade, missing the tip.
Not certainly ancient, but possibly the short, triangular form of Manning (1985) Type 16. A long-lived from, not closely datable.
Wt: 14.5g; L: 65.5mm; W: 21.4mm; T: 4.4mm

S.353: Iron knife (Pl. 14.71)
BM: 1992,0210.3; Site code: SA/BH
Findspot: Trench 5
Context details: Pit: SA5/3. From top 2–3cm of pit – i.e. may not necessarily relate to pit contents.
Simple iron knife with flat back and heavily corroded blade, missing the tip. The plate-tang is pierced to allow bone or wooden plates to be riveted on at either side to form the handle.
Not certainly ancient, but closest to Manning (1985) Type 1b, a Roman form most common in the 1st century AD.
Wt: 8.0g; L: 76.2mm; T: 3.9mm

S.354: Copper alloy tweezers (Pl. 14.71)
BM: 1991,0409.5; Site code: ST/AV
Findspot: Area 18
Context details: Metal-detected stray find from 1991 excavation.
Pair of simple copper alloy tweezers. Short, and probably broken at the ends, but the worn semi-circular terminals suggest they may have broken in antiquity and continued in use.
These are unusual in form, since they fuse to a single piece at the top, rather than being made from a single strip bent over to form a loop. Cf. Crummy (1983, 58–9); Crummy and Eckardt (2008, 48).
Wt: 1.7g; L: 33.7mm; W: 6.7mm; T: 1.3mm

Mail armour fragments and fitting

Copper alloy and iron
The authors are grateful to Dr Martijn Wijnhoven for his helpful insights on this material. Any mistakes remain the authors' own.

S.355: Copper alloy mail armour fitting (Pl. 14.71)
BM: 1990,1101.50
Findspot: Not recorded
Context details: Metal-detected stray find from 1990 excavation.
Flat copper alloy 'dolphin' fitting, broken at one end, pierced at the other. These flat S-shaped fittings are generally interpreted as fasteners from mail armour, although other uses are possible. Cf. Hod Hill I37 (Brailsford 1962; BM 1892,0901.543). Such fittings were used on both Iron Age and Early Roman mail armour from the 3rd century BC to the 1st century AD, for the purpose of fixing shoulder guards in place.
Wt: 7.5g; L: 50.0mm; W: 23.3mm; T: 1.3mm

S.356–9: Iron mail armour fragments (Pl. 14.71)
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Four fragments of iron mail armour, apparently cut into small pieces. Rows of interconnected circular links are clearly defined. No joins found, but it is likely that these fragments were part of the same set of armour. Whilst at present this mail armour cannot be closely dated, the ring size of around 4–5mm is consistent with a date from the 3rd century BC to 3rd century AD (Wijnhoven 2022, 261-4).
D(ext): 4–5mm (each ring)

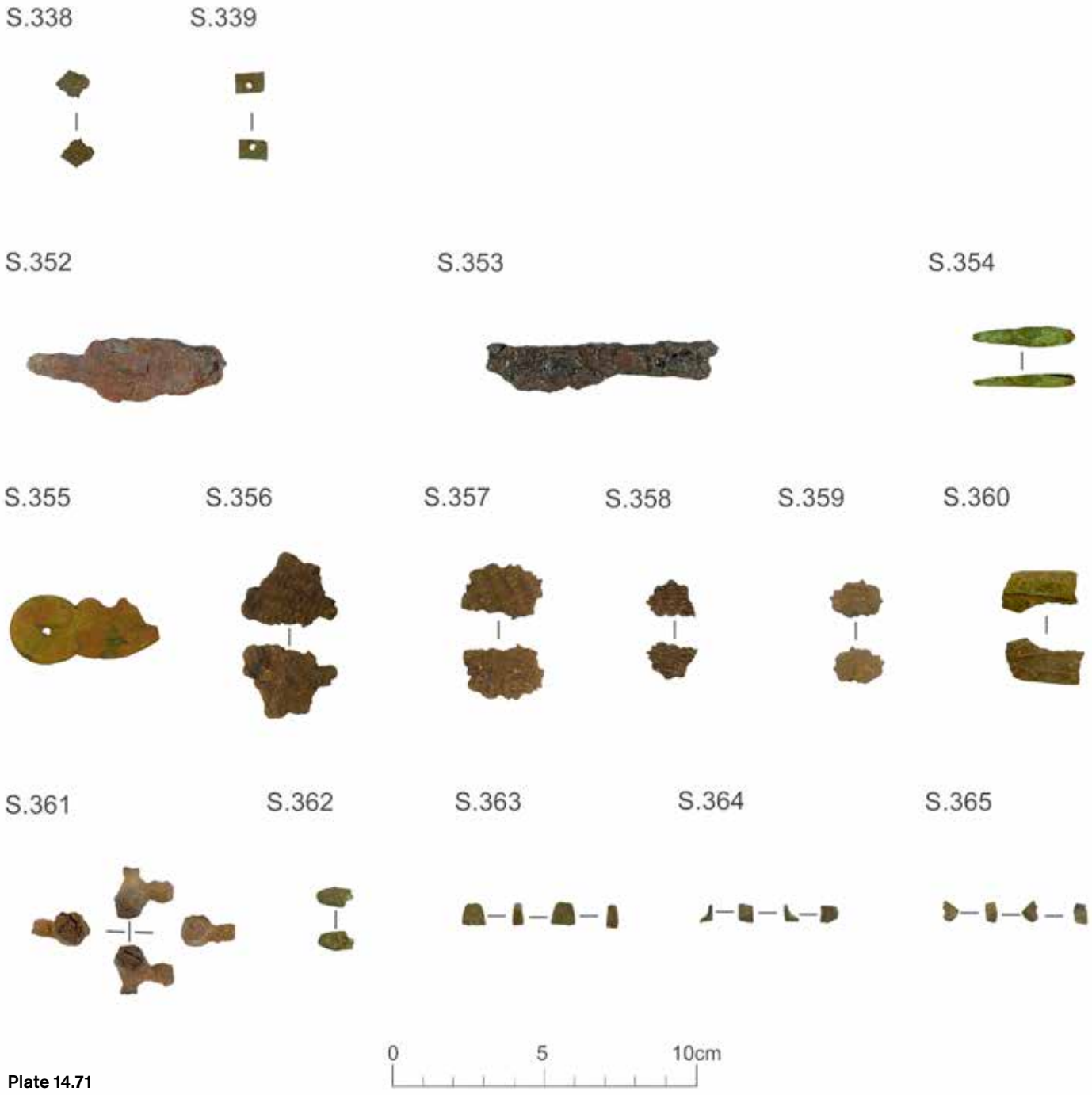


Plate 14.71

S.356: NCM: yellow ticket no. 12
Wt: 5.3g; L: 32.0mm; W: 30.0mm; T: 3.0mm

S.357: NCM: yellow ticket no. 13
Wt: 4.4g; L: 28.0mm; W: 20.0mm; T: 3.0mm

S.358: NCM: yellow ticket no. 14
Wt: 2.1g; L: 21.0mm; W: 15.0mm; T: 3.0mm

S.359: NCM: yellow ticket no. 15
Wt: 1.5g; L: 17.0mm; W: 13.0mm; T: 3.0mm

Unidentified object fragments

Copper alloy

S.360: Copper alloy unidentified object fragment (Pl. 14.71)
NCM: yellow ticket no. 183
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of cast copper alloy object, curved in cross-section, approximately rectangular in plan, and broken on all sides.
Wt: 12.6g; L: 27.0mm; W: 12.0mm; T: 6.0mm

S.361: Copper alloy and iron unidentified object fragment (Pl. 14.71)
NCM: yellow ticket no. 75
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.

Unidentifiable iron object fragment with copper alloy sheet plating.
Wt: 5.1g; L: 21.0mm; W: 17.0mm

S.362: Copper alloy unidentified object fragment (Pl. 14.71)
NCM: yellow ticket no. 44
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of unidentified copper alloy object, circular in cross-section, slightly tapering at one end, broken at the other.
Wt: 2.0g; L: 12.0mm; W: 6.5mm; T: 5.0mm

S.363: Copper alloy unidentified object fragment (Pl. 14.71)
NCM: yellow ticket no. 243
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Flat copper alloy fragment, roughly trapezoidal in plan and rectangular in cross-section. Broken at the wide base of the trapezium, other edges seem original, suggesting this may be the blunt tip of a larger object.
Wt: 1.4g; L: 8.5mm; W: 8.0mm; T: 4.0mm

S.364: Copper alloy unidentified object fragment (Pl. 14.71)
NCM: yellow ticket no. 41
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of unidentified copper alloy object, corner of square or rectangular object with possible circular central hole.
Wt: 1.3g; L: 7.2mm; W: 6.0mm; T: 6.6mm

S.365: Copper alloy unidentified object fragment (Pl. 14.71)
NCM: yellow ticket no. 145
Findspot: Wooded area to west of main site
Context details: Metal-detected stray find 2003–9.
Fragment of unidentified copper alloy object, corner of square or rectangular object with possible circular central hole.
Wt: 0.9g; L: 7.0mm; W: 6.0mm; T: 3.5mm

Chapter 15
Iron Age and Roman Coins

Eleanor Ghey, John Davies, Philip de Jersey, David Holman and Julia Farley

This chapter is divided by period, beginning with the Iron Age coins, followed by Roman and later coins. The section on the Iron Age coins is by far the largest and is divided into a discussion of those from hoards (gold coins from Hoards B, E, F and N; a reassessment of potin coins from Hoard C; a reconstruction of the now-lost 'Bowl Hoard', Hoard P; and a discussion of the possibility of other coin hoards from the site) followed by single finds.

The coin catalogue at the end of this chapter is divided into three main parts, echoing the division of this discussion chapter:

- Part 1: Iron Age coins from Hoards B, C, E, F and N, and reconstructed listing of Iron Age coins from Hoard P
- Part 2: Iron Age single coin finds
- Part 3: Roman coins

The hoard coins were recovered as described for each hoard in Chapters 2, 4 and 12, mostly during ploughing in 1948–50 and Clarke's 1948 excavations, and the British Museum 1990–2 excavation seasons. The hoard coins included in the catalogue are in the British Museum collection, with the exception of the coins from Hoards B and C, which are in Norwich Castle Museum.

Single finds were recovered on multiple occasions. Charles Hodder's 1989 metal-detecting located three coins described in de Jersey (2014, 311) as 'Surface find III', now in Norwich Castle Museum. The British Museum excavations in 1990–2 produced numerous non-hoard coin finds (mostly stray finds made during metal-detector surveys of the stripped areas) which were acquired by the British Museum along with the rest of the excavation archive. Subsequent metal-detector finds were mostly made in the western area of the site between 2003 and 2009 (Treasure cases 2003 T169; 2005 T487; 2007 T695 and 2009 T666, also known as 'North-West Norfolk'; de Jersey 2014, 196.9). A preliminary listing of the latter (derived from the reports for HM Coroner prepared at the British Museum) appears in Marsden (2011, 57–8), although without images or full identifications. These metal-detected finds from 2003 onwards have been acquired by Norwich Castle Museum. At the time the Treasure cases were studied, little attention was paid to the Roman coins and it was not possible to view all these in Norwich, so their identification must in some cases remain tentative.

Iron Age coins

Eleanor Ghey

Part 1: The Hoards

Four of the torc hoards produced Iron Age coinage: Hoards B, C, E and F, summarised below. References are given to the hoard summaries published in de Jersey (2014, 314–17). A listing is also given in Sills (2003, 376–7), although some of the coins have since been reclassified in Sills 2017.

Hoard B (mixed coin/fragmentary torc hoard, coins shown in **Plate 15.1**) (de Jersey 2014, hoard no. 196.1; illustrated in Clarke 1954, pl. XIV):

- 9 gold Gallo-Belgic A and C staters and quarter staters
- 2 blank gold coins (stater and quarter stater)
- 1 British Insular Cf gold quarter stater

Period	Coin type	Hoard B	Hoard E	Hoard F	Hoard N
1 to 3 (200–80 BC)	GB A stater	2		1 (within helmet which contained F) 1 (cut, in torc fragment)	5 (1 cut and one reduced flan)
1 to 3 (200–80 BC)	GB A quarter stater	3		2 (in torc fragment)	1
4 (80–60 BC)	GB C stater	4		3 (within helmet which contained F) 2 (in torc fragment)	2
4 (80–60 BC)	GB C quarter stater				1
4 (80–60 BC)	Insular Cf quarter stater	1	1 (in torc terminal)		
uncertain	Stater	1 (hammered)			
uncertain	Quarter stater	1 (hammered)			
	Total	**12**	**1**	**9**	**9**

Table 15.1 Summary of the coin types represented in Hoards B, E, F and N, with their issue periods

Hoard C (mixed coin/fragmentary torc hoard) (de Jersey 2014, hoard no. 196.2; Dolley 1954). David Holman has studied the coins in Norwich Castle Museum and his reassessment is published below.

- 155 potin coins and 79 fragments (cast base-metal coins from south-east Britain)

Hoard E (composite group including the 'Great Torc', coins shown in **Plate 15.1**) (de Jersey 2014, hoard no. 196.3):

- 1 British Insular Cf quarter stater found in the torc terminal

Hoard F (mixed coin/fragmentary torc hoard, coin shown in **Plate 15.2**) (de Jersey 2014, hoard no. 196.4):

- 9 gold Gallo-Belgic A and C staters and quarter staters (5 of them found within a torc tube). One of the staters is a cut half.

There were also at least two other Iron Age coin hoards from the site. One is the posited scattered coin hoard, N (Chs 8 and 12), and the other the lost 'Bowl Hoard', P. Hoard P is discussed below in a separate section, based closely on catalogue entry no. 196.6 in de Jersey (2014), reproduced with kind permission from Philip de Jersey and the British Numismatic Society. This hoard was dispersed in trade and thus its reconstruction in the catalogue can only be hypothetical.

Hoard N (dispersed coin hoard, coins shown in **Plate 15.2**) (de Jersey 2014, hoard no. 196.5, without details):

- 9 gold Gallo-Belgic A and C staters and quarter staters

Hoard P (de Jersey 2014, hoard no. 196.6):

- Over 6,000 coins, predominantly local silver issues, found inside a metal container and possibly associated with a deposit of gold coins placed below it. The deposit seems to date to the final phase of local coinage.

The torc hoards and Hoard N

With the exception of the insular quarter staters found in Hoards B and E, the gold coins from the torc hoards are all Gallo-Belgic coins, Late Iron Age imports into Britain originating from the area of present-day north-eastern France and Belgium (see **Table 15.1**). Hoard N is of a similar character, despite apparently lacking other artefacts. The nine coins from Hoard N (cat. nos 179–87) consist of five Gallo-Belgic A staters (one of which has been cut, removing part of the flan) and one quarter stater, two Gallo-Belgic C staters and a worn Gallo-Belgic C quarter stater, identified by Sills (pers. comm.) as struck from the same flawed die as specimens recorded from findspots further south in Essex, Kent and West Sussex. It should be noted that Hoard N was dispersed and was identified on the basis of the proximity of the coins to each other (see Ch. 12).

A terminal date of 80–60 BC has previously been suggested for the latest coins in the torc hoards (e.g. Haselgrove 1995, 123), with the absence of Gallo-Belgic E coins, which were traditionally thought to have come into widespread circulation in Britain during the 50s BC, suggesting that the torc hoards were most likely to have been buried in the early to mid-1st century BC, around or before *c.* 60 BC. This is the period immediately before local coin production began (Ch. 23). The absolute dating of Iron Age coins continues to be a matter for debate and in the absence of consensus the most widely used dating is adopted here, with the proviso that it is likely to be subject to reinterpretation. The dating of the coins from Hoards B, E, F and N do suggest that these hoards are broadly contemporary, with the latest coin in Hoard F (Gallo-Belgic C) dating to Iron Age coin period 4, *c.* 80–60 BC (using periods from de Jersey after Haselgrove (de Jersey 2014, 11; Haselgrove 1993, 35)). It should be noted however that Sills (2017, 710) extends the latest possible dating of the Insular Cf quarter staters (of which there are two in the Snettisham mixed torc and coin hoards, one in Hoard B and one in Hoard E) into period 5 (*c.* 60–50 BC). Gallo-Belgic D and E are also thought by Sills to belong to period 5 but Gallo-Belgic E is notably absent from the Snettisham hoards. It is, however, one possibility suggested by Sills (2003, 376) on the basis of weight and metallurgy for the hammered-out stater in Hoard B (cat. no. 11), though an insular product may also be possible. The wear on the period 4 Gallo-Belgic C quarter stater from Hoard N (cat. no. 187) could also indicate a longer period between coin production and deposition in this hoard. A detailed summary of current debates on the dating of imported gold coinage in Britain cannot be given here, but increasingly archaeological evidence would seem to support the argument for pushing back the absolute chronology of particular Gaulish issues and lengthening use periods in general (see Haselgrove 2019). Therefore, given the challenges of dating this

material and the apparent absence of Gallo-Belgic E, a terminal date of *c.* 60 BC would seem reasonable for the gold coinage in the torc hoards.

The treatment of these coins is also of interest. The 'hammered' coins in Hoard B (cat. nos 11–12) have been flattened on both sides so that a design is no longer visible. The stater is now 22mm in diameter (comparable in size to the other Gallo-Belgic A staters in the hoard) and the quarter stater 13mm (comparable with the Gallo-Belgic A quarter staters in the hoard). Clarke (1954, 59) mentions that the larger of these two blank coins was found sandwiched between the two staters, and the smaller between two quarter staters. It seems possible, therefore, that this modification was carried out for reasons unknown but related to their use as separating pieces in the deposit.

The quarter stater found in the terminal of the Great Torc in Hoard E (cat. no. 169) shows unusual patterns of wear, with many parallel scratches in the areas of low relief on the obverse in two directions, as well as wear to the higher relief areas. The cut stater from Hoard F (cat. no. 174) is extremely worn and has been cut straight in half, apparently along the hair bar with the 'face' portion surviving.

One of the Gallo-Belgic A staters from Hoard N (cat. no. 180) has had an irregularly shaped portion consisting of about one third of the flan removed by cutting from the edge and along the hair bar, although the remaining portion is approximately half a stater in weight. It is possible that this could relate to post-depositional damage but given the softness of gold it seems unlikely that such damage would not also have bent the coin. It may also be significant that the area of the obverse depicting the human head above the neck has been removed, leaving the cloak and elaborated hair.

Another coin from Hoard N (cat. no. 181) is much reduced in size around the edge of the flan so that the 'face' is also missing but this may be the result of wear, or striking on a small blank, as the edges are smooth. A central, circular area of the reverse is particularly worn. One other stater from Hoard N (cat. no. 179) has a bent flan and an indentation or peck-mark is visible on the interior of the fold in the area of the charioteer's hand. Another stater (cat. no. 182) appears to have a worn cut on the head perpendicular to the hair bar. This coin has a pitted surface, possibly from the action of heat or prolonged surface exposure.

Deliberate damage of coins prior to deposition in hoards has been noted elsewhere, although particularly in hoards containing South-Western British Iron Age coinage (see Bland *et al.* 2020, 246 for an overview). As well as the systematic cut-marks observed on South-Western staters, damage may take other forms, from the surface application of heat to the complete melting down of coins. Such pre-depositional treatment occurs on some but not all of the site finds discussed below and is mainly found in the earlier coins, suggesting it belongs to the earlier phases of deposition (or a phase of activity taking place prior to this) at the site and should be considered alongside the treatment of the other metalwork (deliberate fragmentation and combination of torc components is discussed in Ch. 20).

A reassessment of the coins in Snettisham Hoard C

David Holman

Hoard C is unique among the Snettisham hoard deposits in that it does not contain gold coins, but has as its principal component a sizeable quantity of base-metal potin coins, together with a large number of copper alloy torc fragments and rings. Potins are cast bronze coins, made in a tin-rich copper alloy which gives them a distinctive silvery appearance. They were produced in strips in moulds, each coin linked to the next by a runner channel, and as such each coin has sprues on one or both sides. The obverse depicts a stylised head of Apollo, while the reverse shows a stylised bull with the letters 'MA' above, ultimately derived from struck bronze coins of Massalia (Marseilles). Potins are traditionally associated with Kent, where they are most densely distributed, although they are found throughout south-east England and beyond. The first British potins, known as Kentish Primary or Thurrock potins, were likely produced from the mid-second century BC. Just over 30 of these types have been discovered at Snettisham, all of which are stray finds, discussed below (Cat. nos 368– 401). Hoard C exclusively contains a later type known as Flat Linear potins, produced in the 1st century BC. There have been numerous attempts to classify the Flat Linear potin series, notably by Derek Allen (1938), who divided them into Classes I and II based on their flan sizes (large and small respectively). He later expanded this system, dividing Class I into types A–L, and the smaller Class II coins into types M–P (Allen 1971).

The national dataset of Flat Linear potin coins has since increased significantly in the seven decades since Hoard C was first published, which has enabled a much-enhanced understanding of these coins. This includes new potin hoards (such as one found during archaeological excavations close to the North Foreland in Thanet, Kent, in 1999), the reassessment of older hoards (such as the Birchington Hoard, also from Thanet), and large numbers of metal-detector finds. Work on this material led the current writer to develop a new classification system for the entire Flat Linear series (Holman 2016). This system replaces Allen's two classes (I and II) and 15 types (A–P), by splitting the series into seven groups (A–G), each of which can then be divided into subgroups, types, subtypes and variants. Coins of Allen's Class I fall within Groups A to F while those of Class II are all Group G, with his 51 varieties being reorganised and substantially expanded. Holman's groups are broadly chronological, with Group A being the earliest (production beginning in the second half of the 2nd century BC) and Group G the latest (with production of Flat Linear potins terminating around the middle of the 1st century BC). This refined classification demonstrates chronological changes in distribution, with increased spread of the coinage beyond Kent over time. Group A has an almost wholly Kentish distribution, while Groups F and G are scattered across the whole of south-east England and beyond, even as far away as Somerset and Yorkshire, and it is likely that some of these later potin types may have been produced in the North Thames region.

As a result of this work, it is now possible to undertake a reassessment of Hoard C together with a fully updated and expanded catalogue of the contents.

Previous work on Hoard C

The first catalogue of Hoard C, together with a report on the origin, distribution and manufacturing methods of potin coins, was published by Michael Dolley (Dolley 1954). His catalogue used an adapted version of the potin classification system originally devised by Robert Carson in his initial summary of the Sunbury hoard (Carson 1950). Dolley's catalogue includes 116 coins, but he made no attempt to include the fragments, which he thought represented probably another 29 coins, giving an estimated total of 145 coins. Other than Carson's system, the only pre-existing classification of the Flat Linear series available to Dolley was Allen's separation into Classes I and II (Allen 1938). All of the Hoard C coins fall within Class I, the larger and earlier class.

Dolley made the assumption that the potins were not current at the time of their burial, based on many of the gold coins from other hoards at the site being heavily worn and probably no longer current at the time of deposition (Dolley 1954, 74). It should however be borne in mind that a potin which looks worn from heavy use is more probably like that as a result of poor casting. Following on from this, he concurred with Allen's previous acceptance of an early date for the potins, although part of his reasoning was based on the appearance of apparent lettering on the reverse of one coin, which had been pointed out to him by Edward Robinson (*ibid*., 77–8; 78, note 2). The coin in question is one of the earliest coins in the hoard (Cat. no. 14, below), but in fact, as Allen later realised, the supposed inscription is nothing more than flaws in the surface of the flan.

Dolley also argued that all Allen Class I potins circulated alongside each other, probably emanated from a common centre over a very short period of time and could be regarded as a single issue (*ibid*., 82). The far more comprehensive dataset now available does not support this argument. Coins from archaeological excavations, as opposed to those in hoards, show that many of the earlier coins had apparently disappeared from circulation by the time Group F was in use. It can also be seen that the composition of the Flat Linear hoards is often very different from the surrounding single finds (Holman 2020, 36). It is now clear that production of the Flat Linear series extended over many years with production taking place at multiple locations, even outside the series' traditional Kentish homeland (Holman 2016). Dolley's statement that deterioration in style was not accompanied by a reduction in weight can also now not be sustained across the series as a whole.

As Dolley noted, the Snettisham hoard was well outside the normal circulation area of Flat Linear potins, the nearest other such coin known at that time having been found 70 miles away (Dolley 1954, 80). He assumed that the hoard coins had come from the Lower Thames region, at some date after *c*. 75 BC. That region, rather than east Kent, may well be right, but the date is probably several years too early, as will be discussed below.

Dolley thought that broken coins were proportionately more frequent among the less common types and that this might be a line of enquiry worth pursuing (*ibid*., 82, note 2). The updated catalogue, which includes many of the previously unidentified broken coins, shows no evidence of any such bias, with many of the additional broken coins now seen to belong to Dolley's later and more common types. Owing to a discrepancy in some of the weights of coins listed by Dolley, it has not been possible to identify which coins 12 of Dolley's numbers refer to (Dolley catalogue numbers 1, 4, 20, 22, 25, 41, 65, 69, 71, 93, 96 and 108). Where there was uncertainty with matching Dolley's numbers to other objects this is indicated with a question mark in the updated catalogue.

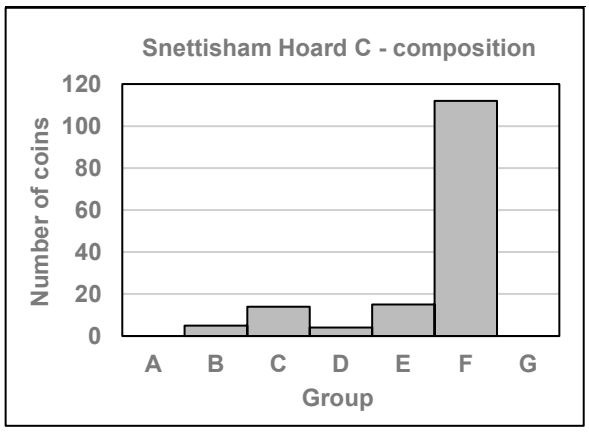
In 1971, Allen published his classification of Flat Linear potins and converted Dolley's catalogue into his new system (Allen 1971, 149). As the range of known types was then much smaller, there was inevitably a far lesser degree of separation of the contents of the hoards than is possible today. Both men were correct in distinguishing between coins based on the direction of the head and bull on the obverse and reverse respectively, and whether the head contained an eye-ring with a central pellet or not, features which impact on both chronology and the linkage between different but clearly related types. Allen used 18 of the Hoard C coins as models for the drawings to accompany his 1971 paper (Allen types B, C3, C4, D3, E, F1, F6, GB3, H1, H2, H3,J3,J4,J7, L2, L3, L4, L6), although there are inaccuracies in some of the drawings.

The most recent summary of the hoard by Philip de Jersey (de Jersey 2014, 312–14; hoard no. 196.2) provides only an abbreviated listing based on Allen's classification, as the new system developed by the author (Holman 2016) was at that stage still in preparation. De Jersey included three separate alternative lists for the contents of Hoard C, one based on Allen (1971), one from records of the coins in the CCI, and one using details provided by the current writer which was different again, mainly because a larger number of coins could by then be identified (de Jersey 2014, 313, table 35). Only 98 Hoard C coins are currently recorded in the CCI and it has been found that a small number of errors occurred during recording. These errors are noted in the updated catalogue.

The composition of a selection of 20 coins from Hoard C has been analysed by Peter Northover, who noted that they varied not only typologically, but also in their metal content (Northover 1992, 262–3). However, as no weights are shown it is impossible to know which coins were tested (*ibid*., 296–7).

A reassessment of Hoard C

Dolley's estimated total of 145 coins has until recently been accepted by other researchers, and was thought to be more or less correct on the current author's initial visit to Norwich Castle Museum in 2011. This total was derived from 129 coins – many complete, others partially reconstructed from fragments – which were possible to identify using Allen's 1971 system with some modification, and 122 unidentified fragments, of varying sizes, in 16 coin-tray compartments. On a further visit in 2014, using the author's new classification system for Flat Linear potins (Holman 2016), it was possible to improve the identifications. A further 26 coins were identified and, in some cases, partially reconstructed from 43 of the previously unidentified fragments. There are now 155 confirmed individual coins in the hoard, of which 143 have been identified to at least type



Group	Number	%
A	0	0
B	5	3.3
C	14	9.3
D	4	2.7
E	15	10.0
F	112	74.7
G	0	0
Uncertain	5	–

Figure 15.1 Group-level composition of Snettisham Hoard C (© David Holman)

level under Holman's classification, eight to group level and the other four within a group range. There remain a further 79 fragments, mostly very small, which cannot be associated with each other or any other coins. Based on the average weight of the complete coins in the hoard, these fragments could represent perhaps another eight coins, although in practice this is not possible to determine and some, perhaps even most, of these fragments are more likely to be part of known incomplete coins.

The group-level composition of Hoard C is shown in **Figure 15.1**. There are no Group A types, which are in any case extremely rare in the Flat Linear hoards, the only examples being one each in the Birchington and Thurnham hoards. Neither are there any Group G types as the hoard does not go late enough to include these. Three quarters of the hoard belongs to Group F, which comprises the latest element of the hoard, but there is a long tail back to Group B, the earliest coin present being type B2/2-1c, probably dating to the late 2nd century BC.

Hoard C contains a high number of coins which are stylistically relatively late within the range of Group F types present. Group F is dated by Holman to *c.* 75/70–60/55 BC, based on evidence from elsewhere (Holman 2016, 9–11). The latest phase of Group F (subgroup F4) is, however, absent. The evidence suggests that the hoard was deposited towards the latter stages of Group F, in which case a date of *c.* 60 BC or shortly after is likely. This is broadly contemporary with the suggested dates for the numerous gold hoards containing coins from the site, as discussed above. It could also be that the potins were buried after all the early gold hoards, but it is not possible to refine the dating to that level of accuracy.

Figure 15.2 shows Hoard C compared with four other selected Flat Linear hoards studied by the author. The chart shows the percentage of coins in each group (A to G, in chronological sequence) within each of these hoards. The earliest hoard shown is Birchington, Kent, which clearly peaks in Groups C and D before terminating very early in Group F. Although not shown here, the other Kentish hoards also terminate earlier than either Snettisham or a cluster of hoards from the lower Thames Valley, which include two large hoards illustrated here, Sunbury and Brentford I. The latest hoard shown is Takeley, Essex, the earliest coin in which is later than anything in the other hoards shown.

The closest typological, and thus chronological, comparisons to Snettisham can be found in the Thames Valley hoards, although the overall profile of Snettisham is later than either of these. The latest Flat Linear types in Hoard C are the same as those at Sunbury and Brentford, although the proportion of Group F is significantly higher at Snettisham (75%, as opposed to 49% for Sunbury and 58% for Brentford), which potentially indicates a later deposition date for Snettisham. Many of these coins fall within Dolley's type IIB1, which he noted as being in a much higher proportion at Snettisham than at Sunbury (Dolley 1954, 81).

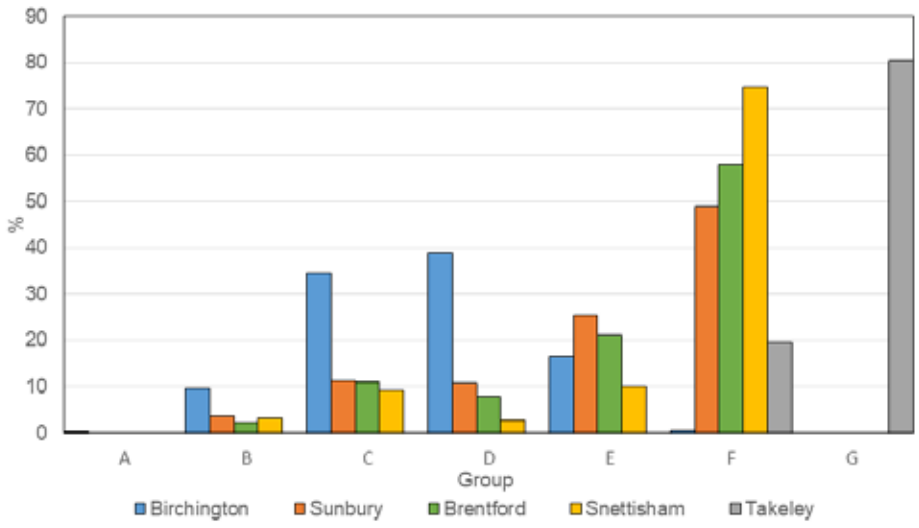


Figure 15.2 Comparison of Hoard C with selected Flat Linear potin hoards (© David Holman)

Although the number of identifiable coins from both hoards is now much greater, Dolley's observation remains essentially correct. The typologically latest type present in all three hoards is F3/3. Although the numbers are small, Snettisham has roughly double the proportion of this type than either of the Thames Valley hoards, again accentuating the later profile of Snettisham. Type F3/3 is absent from the other Thames Valley hoards as they are currently constituted although none are closed deposits and type F3/3, in any case scarce, may or may not have been present at the time of deposition.

Although we are looking at a narrow timeframe, the figures as we see them, with the noticeably higher proportion of Group F coins demonstrating an overall later profile, appear at face value to suggest that the deposition of Hoard C is unlikely to have taken place prior to the deposition of the Thames Valley hoards shown here. However, one other possibility for the differences between these hoards can be considered: differential rates of accumulation, assuming that the coins were not all removed from a circulating pool at around the same time. Analysis by the author of the Flat Linear potins from excavations in Canterbury has shown that virtually all of these belong to Groups F and, particularly, G. Significantly, there are no Group B potins from Canterbury despite them being common individual, stray finds in the surrounding area, which suggests they had ceased to circulate before the site was established sometime in the mid-1st century BC. If this argument is extended to the hoards, this could suggest that the earlier coins had been accumulated well before their eventual deposition and that their collection was not a single event. Hoards terminating at the same point, but with different typological distributions, may have been deposited within a very short period of time, the differences being the result of collection over an extended period rather than a snapshot of the circulating coinage at the time of deposition.

The origin of the potins deposited at Snettisham is less clear-cut than might at first appear. The automatic assumption would be Kent, but the composition of the hoard makes one hesitate and consider whether this was indeed the case. Some types in the hoard are rarely found in Kent, but they are known in much larger quantities from the Thames Valley hoards, for example type F1/3, which also appears among the few single finds from that area. There are only three recorded single finds of F1/3 from east Kent plus one in the Birchington hoard, although several examples have been noted in the as-yet uncatalogued Thurnham hoard. Where type F1/3, of which there are 12 examples at Snettisham, was produced is not possible to tell from the surviving evidence, but the possibility of it being a derivative issue originating in the Thames Valley, or at least somewhere other than east Kent, cannot be discounted. There are hints of derivative issues elsewhere in the Flat Linear series, in particular subgroup G4, which the evidence suggests was probably produced somewhere in the Essex/Hertfordshire region. Some other types present at Snettisham are completely absent from Kent on current evidence, but again they do appear in the Thames Valley hoards. This does not prove that those types were produced in the Thames Valley region, but the suspicion must remain that some of them may not be Kentish in origin, or at least not from the eastern part of the county. It can also be noted that type F2/1, the distribution of which is largely Kentish, is absent from Snettisham, although it is not inconceivable that this type, which is the likely immediate prototype of type F4/5, is slightly later.

Potin coins were produced in moulds, in strips of unknown length. Twenty of the coins in Hoard C have only one sprue, indicating that they were produced in the furthest depression in the mould. It has been possible to calculate the ratio of single-sprue coins as a proportion of the Birchington (8.2:1) and North Foreland (Kent) (8.9:1) hoards, but this is a trickier proposition with Snettisham because of the much greater number of incomplete coins. If it is assumed that this was the total number of single-sprue coins in the identified assemblage of 155, then a ratio of 7.75:1 is arrived at, which is not too far removed from the figure for Birchington. However, it may well be that the quantity of single-sprue coins in Hoard C was higher than can now be determined because a number of the identified coins do not include the relevant parts of the flan which contain the sprue and it is possible that the ratio is closer to 7:1. It can also be noted that at least two, and possibly up to five coins, have misaligned sprues, suggesting that they were the top coin in a strip. This very low number in comparison with the single-sprue coins might appear odd, but such a discrepancy has also been noted in the Thanet hoards. The reason is that coins from the top of the strip are generally hard to identify because the sprues, even if they survive, are often not long enough to determine that they are misaligned, and the resulting lack of evidence means that the number of coins noted as being from the top of a strip is probably a significant under-representation.

Most of the types present in Hoard C are known elsewhere although a few minor variants are otherwise so far unparalleled. The hoard contains one of only two known examples of type B3/2-5, and two of the three known examples of type C2/1-1.

The weight and diameter distribution are shown in **Figure 15.3** and their range and mean in **Figure 15.4**. As has previously been noted for the Birchington and North Foreland hoards, these show considerable variation, particularly in weight, demonstrating the difficulty of maintaining a standard weight for mould-cast coins, but the trend is for the weight and diameter to reduce over time (Holman 2020), a consequence of changes in the manufacturing process as noted by Van Arsdell (Van Arsdell 1989, 76–9). Although the range bars for Group F are of greater length than those for the other groups, this results from a combination of a much higher number of coins in Group F for which the data is available and a small number of unrepresentative outliers. The overall trend is clearly shown by the median reduction in both sets of data (**Table 15.2**). The reason for the differing totals is because the weights of incomplete coins have not been included, nor the diameters of those for which the data are unavailable because an insufficient amount of the coin survives to measure this.

Snettisham Hoards B and C were found by ploughing on consecutive days and were to some extent mixed up during recovery, and the totality of their individual contents cannot

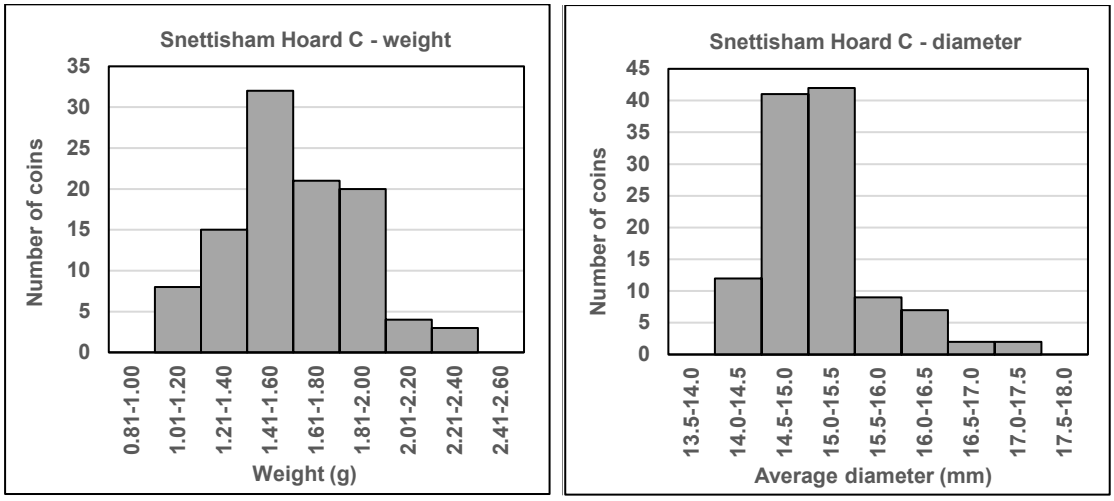


Figure 15.3 Weight and diameter distribution in Snettisham Hoard C (© David Holman)

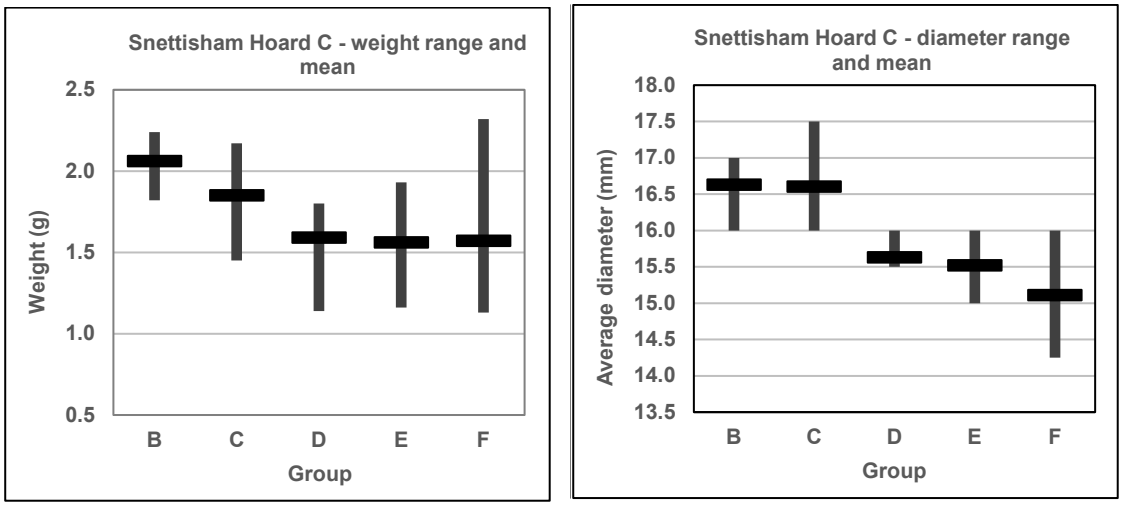


Figure 15.4 Weight and diameter range and mean, per group, in Snettisham Hoard C (© David Holman)

Group (weight – g)	Min.	Max.	Mean	Median	Number
B	1.82	2.24	2.06	2.11	3
C	1.45	2.17	1.85	1.87	8
D	1.14	1.80	1.59	1.70	4
E	1.16	1.93	1.56	1.60	11
F	1.13	2.32	1.57	1.53	77
Overall	1.13	2.32	1.61	1.57	103
Group (diameter – mm)					
B	16.00	17.00	16.63	16.75	4
C	16.00	17.50	16.60	16.50	10
D	15.50	16.00	15.63	15.50	4
E	15.00	16.00	15.52	15.50	13
F	14.25	16.00	15.11	15.00	84
Overall	14.25	17.50	15.35	15.25	115

Table 15.2 Summary of weight and average diameter data in Snettisham Hoard C

now be determined with certainty (Clarke 1954, 30–1). The potins presumably suffered a degree of fragmentation as a result of being hit by the plough. How many more, if any, tiny fragments of potin remain in the ground at Snettisham cannot be known, but it is possible that the hoard contained incomplete coins, and that what has been recovered is all there were. Limited evidence for the possible inclusion of incomplete coins in Flat Linear potin hoards can be seen elsewhere, although in several cases the circumstances of discovery render it uncertain. Only three Flat Linear hoards have been archaeologically excavated *in situ* and one of these (North Foreland) may have been disturbed in antiquity, with the status of the two incomplete and broken coins uncertain (Holman 2020, 31). Another, at Takeley, contains several incomplete coins which had conceivably entered the ground in that condition (Van Arsdell and Northover 2004; Holman 2022). However, the most significant indication that the phenomenon of the burial of fragmentary objects may have extended to potins can be seen in the Hillingdon hoard, discovered in 2020 and consisting entirely of Groups F and G, which included incomplete coins even at the undisturbed base of the deposit. (The writer expresses his thanks to HS2, Costain Skanska Joint Venture and Skanska Costain STRABAG Railways Joint Venture for allowing information about the Hillingdon hoard to be published here.) Apart from these, there are very few fragments in the Birchington hoard, although it is unknown if fragments were found but not retained at the time of discovery. There are numerous fragments in the Sunbury hoard, but their status is again uncertain. The Thurnham hoard contains many fragments but this hoard was disturbed by ploughing and the findspot is in an exceptionally flinty location, which is thought to be largely responsible for the shattered condition of the coins. That Hoard C contained fragmentary artefacts in addition to the coins, and also that Hoard F contained a large quantity of fragmentary material, lends weight to the notion that some of the coins themselves were also buried in an incomplete state, but again the circumstances of discovery make this impossible to confirm (Joy 2016, 244–7). In summary, this reappraisal of the potin coins from Hoard C shows that it contains a wide range of types across much of the Flat Linear series, with the earliest types probably dating to the late 2nd century BC and the latest suggesting a terminal date of *c.* 60 BC or shortly after.

Hoard P: The 'Bowl Hoard'

Philip de Jersey

This text is based closely on the catalogue entry, no. 196.6, in P. de Jersey (2014) *Coin Hoards in Iron Age Britain* (British Numismatic Society Special Publication no. 12).

The Bowl Hoard is, to date, probably the largest single hoard of British Iron Age coinage, and without a doubt one of the most important. The fact that it was illegally detected and then dispersed by two well-known dealers, before a complete record could be made of its contents, is a great loss not just to Iron Age numismatics but to our understanding of the conquest period in East Anglia and beyond.

As far as can be ascertained, the hoard was found in February 1991, by two detectorists searching without permission in the 'gold field' at Snettisham. The bulk of the coinage was reportedly contained within a metal bowl, apparently of silver. The bowl is said to have been 30cm in diameter at the rim, standing 20cm high. It was sold to a well-known coins and antiquities dealer and presumably on to a private collector.

Beneath the bowl there were 90 or more gold coins (a source reported 500 such coins to Ian Stead (Stead 1998, 147)), plus three saucer-shaped ingots: one in gold, one in silver alloy and one predominantly of copper (Chadburn 2006, hoard 41, 'Hunstanton I'). The ingots were apparently melted down after discovery. Above the bowl were three brooches and a torc fragment (*ibid.*). The hoard was said to have included so much material that it had to be dragged across the field. This may be hyperbole on the part of the finders – the maximum number of coins listed below would have weighed somewhere in the order of 12.5kg, hardly an enormous burden – but it is perhaps lent some support from the discovery of a number of fragments of silver bowl on the site during Ian Stead's excavations in November 1991 (P.1–7), which he suspected at the time were from a hoard (information from BM Department of Coins and Medals; Stead 1998, 146–8). It is tempting to suggest that these were lost as the hoard was removed from the field, and in this volume they are interpreted as likely being fragments from the Hoard P bowl.

There are rumours that the Bowl Hoard was located beneath one of the hoards which had been excavated by the British Museum in the autumn of 1990. However, this seems extremely unlikely, since the suggested terminal date of the Bowl Hoard in the mid-1st century AD appears to be many decades later than the deposition of the excavated hoards (none of which contain objects dating later than *c.* 60 BC). The bases of the hoard pits F, G, H, J, K and L were exhaustively investigated in 1990 by Stead's team. Stead hypothesised that the Bowl Hoard had been located beneath the 1990 spoil heap. This is in keeping with the locations of the fragments of silver bowl P.1–7 in the north-east corner of the field (Area 21) and a large pit dug by illicit detectorists in this area early in 1991 (see Chs 2, 4 and 12).

It is very difficult to obtain reliable figures for the precise number of coins contained in the hoard. Chadburn (2006, hoard 41) gives a total of *c.* 6,690, consisting of *c.* 6,600 silver coins in the bowl and the *c.* 90 gold said to have been found beneath it. Other sources have provided a total as high as *c.* 8,300, including *c.* 7,600 silver units and as many as *c.* 600 staters, 98 of which were 'in good gold', and 108 quarter staters. The gold content appears to have been significantly exaggerated in these figures (see group A in the list below), but it is difficult to be sure about the silver. The situation is further complicated by the existence of several parcels of coins which may or may not have been part of this hoard. Thus Chadburn (*ibid.*, hoard 45) lists as a separate deposit her 'Hunstanton II', a group consisting of at least 56 Norfolk Wolf staters and 100 silver units, while acknowledging that it may also have come from the 'gold field', and that it was found by the same detectorists as the Bowl Hoard. The group of 56 Norfolk Wolf staters was seized at Heathrow on the same occasion as 594 silver units allegedly from the Bowl Hoard; both groups were found not to be Treasure Trove in November 1994 and returned to Dolphin Coins. There are

good numismatic and chronological reasons why the Norfolk Wolf staters and associated early Icenian silver should be considered as a separate deposit to the Bowl Hoard (Talbot 2017, 224), and so Chadburn's 'Hunstanton II' (de Jersey 2014, no. 196.7) is not included here.

Chadburn (*ibid.*, hoard 40) also lists a small 'Dersingham bypass' hoard which seems to be chronologically separate from the Bowl Hoard (de Jersey 2014, no. 196.8); this again is not included here, although it is not impossible that it might have been a parcel from the bigger hoard.

The impact of the Bowl Hoard on the coin trade was painfully evident by late 1991, by which time a huge quantity of Icenian silver was available from dealers throughout Britain, and abroad. Indeed, the hoard probably accounts for most of the unprovenanced Icenian silver still circulating in the trade, but in most cases it is impossible to trace these coins back to their source; many of the types involved are also relatively common as single finds, or have been sold from hoards legitimately dispersed since 1991.

No attempt has been made here to identify every possible Bowl Hoard coin in the Celtic Coin Index (CCI). There are however two groups of coins in the Index which can be more reliably associated with the find. In January 1995 a collector borrowed 1,135 silver coins (1,131 units and four half-units) from one of the dealers involved, and recorded these with the CCI (group B, below). The second, smaller group (425 coins, group C) consists almost entirely of coins which have been sold since 1991 with a Bowl Hoard provenance attached, or where some information exists to confirm an association with the hoard. On no account should this group be taken as a representative sample of the whole hoard: there is a marked bias towards inscribed North-Eastern types, for example, because of the interests of a particular collector.

These various groups total 1,673 coins with entries in the CCI, or about one quarter of the lower estimate for the entire hoard provided by Chadburn (above). There are many more coins in the CCI which must have come from the hoard – probably bringing the total recorded to at least 2,500 – and there is potential for more work in the future to identify them.

As far as can be reconstructed, the hoard consisted predominantly of later East Anglian coinage, alongside North-Eastern series coins and some North Thames issues. The silver component appears heavily biased towards the final local issues, e.g. Late Face Horse, Ecen and Anted (Talbot 2017, 223–4). Chadburn (2006, hoard 41) also suggests that there were 'at least three' Republican *denarii* in the hoard. Whilst precise dating is difficult due to the nature of the evidence, Talbot (2017, 109–10) suggests that the composition bears a strong similarity to 'revolt-period' hoards thought to have been buried in the early AD 60s, and this is the most likely date of deposition for Hoard P.

Coins from the three groups outlined above are listed in the catalogue section below (see pp. 379–93).

Other coin hoards from Snettisham

Eleanor Ghey

Two poorly provenanced coin hoards recorded by the Celtic Coin Index from trade are listed by de Jersey as being from Snettisham: 'Hunstanton II' (de Jersey 2014, 196.7) and 'Dersingham bypass' (*ibid.*, 196.8). Both contain uninscribed East Anglian gold and silver, with some North-Eastern coins possibly included in the former. Although it may be possible to disentangle these batches from the large number of coins potentially from the Bowl Hoard (P) on numismatic grounds, there seems little point in speculating further on their provenance, other than to note that there is likely to be further unreported material from the site at large.

Other hoards have been recorded as being from Snettisham parish but are not from this site and are therefore not listed in the catalogue in this volume. A hoard of 91 East Anglian 'Norfolk Wolf'-type staters and other local uninscribed staters, quarter staters and units now in the British Museum (registration numbers 1988,0403.1–43; 1989,0422.1–42; 1989,1120.1–6) is listed by Hobbs (2006, 39) and Sills (2003, 377) as a hoard from Snettisham found in 1987–9 (Gregory 1992, 50). De Jersey (2014, 308–10, no. 195) lists this hoard as Shernborne I and II (Talbot's Shernborne A (2017, 225)) but correctly notes their recorded findspot as within Snettisham parish. The coins were found spread over a 10 x 20m area, apparently deposited in two groups, with associated pottery. A find of 98 coins from the same site reported under the Treasure Act (Talbot's Shernborne B (2017, 226), with addenda) make this a much larger deposit and potentially extends the possible period of deposition into the final phase of East Anglian coinage. However, the presence of 28 Early Roman *denarii* (deposited after *c.* AD 138–41) from the same site (Treasure case 2014 T111) suggests that the site represents a long sequence of deposition of groups of coins and single coins similar to the pattern represented by the stray finds at the Snettisham excavation site, discussed below.

The Snettisham Jeweller's Hoard (Johns 1997) consisting of Roman coins and artefacts dated to after *c.* AD 154–61 was found within the village of Snettisham in 1985 and not at the hoard site, although it does provide further evidence of Roman period activity in the surrounding area (Ch. 3).

Part 2: The Iron Age single finds

The remaining catalogue (Part 2, cat. nos 188 to 414) presents 227 identifiable Greek and Iron Age coins ordered by production region and type. Of these, one (cat. no. 221) was excavated by Rainbird Clarke in 1948, and three (Cat. nos 219, 234 and 259) are from Hodder's 1989 detecting, all acquired by Norwich Castle Museum. Fifty-four are from the 1990–2 detecting and British Museum excavations at the site, though none were found in a stratified context (of these, 53 are in the BM while one (cat. no. 275) was retained by the finder). The other 169 coins derive from the assemblage metal-detected from 2003 onwards, and are now in Norwich Castle Museum.

Some of these coins have been published previously. De Jersey (2014, 315–16) gives partial details of further groups of coins under his listing for Hoard F, including seven that were found by Hodder around the time of the discovery of Hoard F in 1990 (cat. nos 197, 220, 239, 240, 362, 365 and 411), 26 coins (including a fused lump) found in the British Museum excavation that followed and a further 10 coins subsequently metal-detected by Hodder. He raises the question of possible association of the 33 coins from the first two groups with

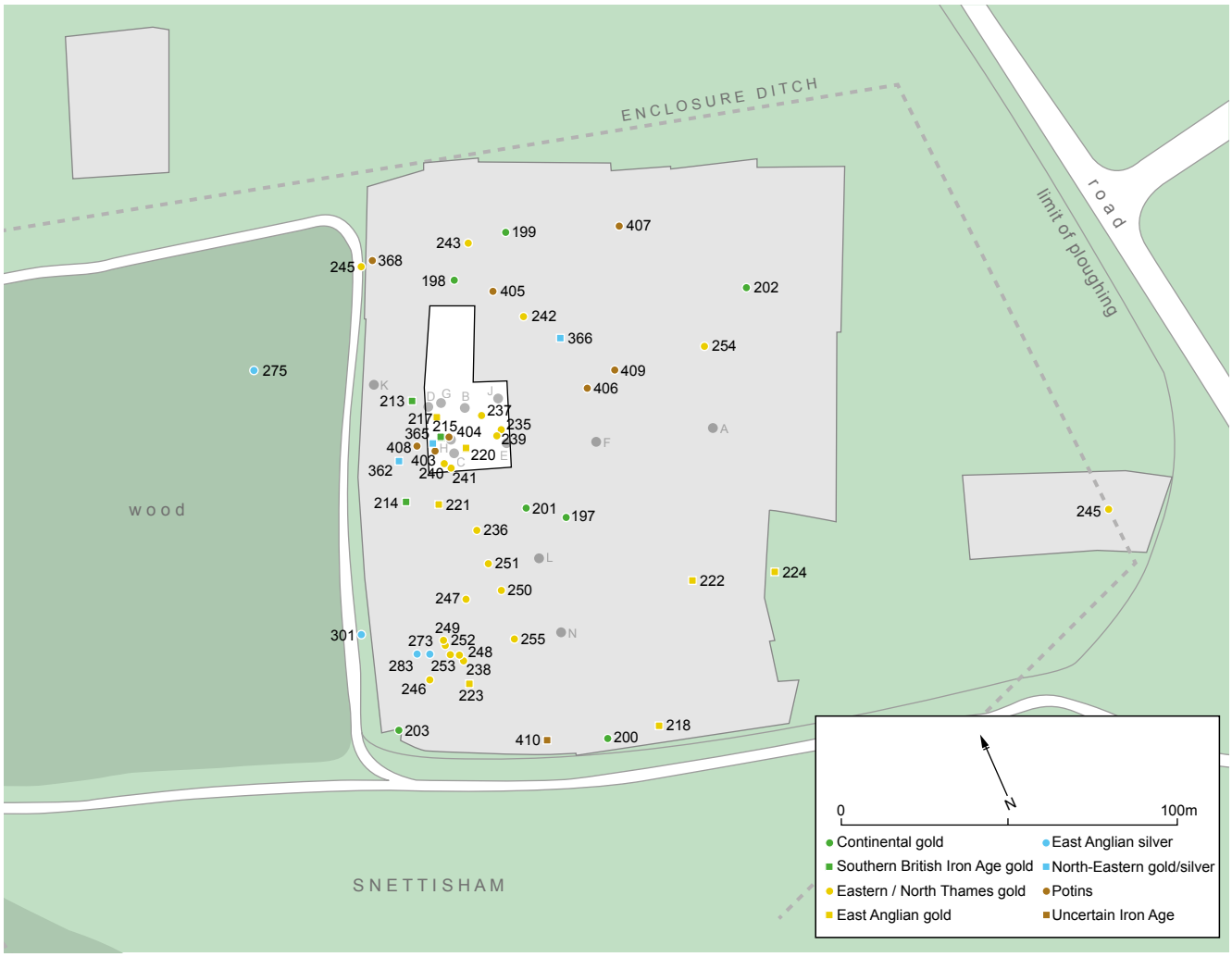


Figure 15.5 Distribution of single finds of Iron Age coins from the 'gold field' in relation to the hoards

Hoard F. Here, these coins have not been listed as they do not have a particular spatial relationship with Hoard F, merely being found in the same season. Further coins included below have not been published in earlier listings of material from the site and only 18 Iron Age coins from the excavation now in the British Museum were published by Hobbs (1996) with the provenance 'Snettisham Excavations 1988–91' (Hobbs 1996 nos 218–19, 249–52, 265–7, 272–8, 3187, 3545). The latter catalogue does not include imported coinage but many of the gold coins in the catalogue have since been identified by John Sills in his work on the continental and early British series (Sills 2003 and 2017).

The single finds span a wider chronological range than the hoard deposits, with all coin periods from 1 to 8 represented. This has significant implications for the interpretation of the site, particularly when considered alongside the assemblage of Roman coins discovered, as discussed below. Early imported coinage is present at the excavation site in the form of a plated Gaulish half stater, a Gallo-Belgic A stater and quarter stater and a Gallo-Belgic C stater (with the possible plated core of another) (cat. nos 197–201). As with the hoard assemblages, the continental gold is mostly worn and may have circulated for some time prior to deposition. Unlike the hoard coinage, the gold coins from the site span a longer chronological period, with a cluster in period 4 to 5 represented by early Southern / Eastern uninscribed coinage, followed by two plated copies of Gallo-Belgic E staters (traditionally attributed to period 5) and a North-Eastern stater and scyphate quarter stater (attributed to period 5 to 6). The proportion of plated coins from the site is higher than in the hoard coins. The wider metal-detected assemblage also contains a large group of local East Anglian silver units and fractions lacking from the excavated assemblage.

It can be seen that Snettisham attracted an unusual amount of non-local coinage, with British coins from the Southern, North-Eastern, Eastern and Kentish regions, the plated Gaulish stater and eight Greek coins from much further afield (including a 3rd-century BC bronze coin of Miletos with a previously unrecorded magistrate, Kleisipp[…] (cat. no. 195). The latter are likely to have had a long period of circulation and arrived in Britain around the same time as early continental Iron Age imports. The imported coinage may have travelled within Britain before finally reaching Snettisham, as is suggested by the wear and distribution of die-linked coins such as the Ca2 quarter stater (cat. no. 187, from Hoard N), for example (Sills pers. comm.). These networks connecting Snettisham with the Thames Valley area, Kent and Sussex may also be seen in the movement of potins discussed by Holman above.

Figure 15.5 shows the distribution of the single find Iron Age coins from the 'gold field' (including one discovered in

Figure 15.6 Gallo-Belgic D quarter staters (obverse and reverse) with deposit on the surface of the coin. Norwich Castle Museum, 2007.6, 2007.7 and 2007.8

1948, those from the British Museum 1990–2 excavations, and three from earlier metal-detecting by Hodder in 1989). Given that these finds lack stratigraphic context, it is difficult to assign meaning to their spatial distribution with confidence. It seems likely that the assemblage contains further dispersed hoards and some such potential groupings are discussed below. However, the overall impression is one of a large number of Iron Age coins scattered in and around the area of the torc hoards and in a radius of about 100m from the core area of the hoards (containing B, C, D, E, G, H). The post-2003 metal-detected material cannot be plotted but comes from an adjacent wooded area to the immediate west of the 'gold field' and appears to have had a similar density of distribution. The dispersed distribution of the coins could be the result of disturbance of deposits but the mixing of a variety of coin types would seem to suggest that many of the coins were individually deposited at the site rather than coming from hoards.

Any attempt to reconstruct hoards in the metal-detected assemblage must necessarily be speculative (and indeed incomplete, given the loss of coins from the site to illegal metal-detecting), but it is possible to suggest some potential groupings (see also Talbot 2017, 110). Among possible scattered smaller hoards within the deposit is a group of 23 'Norfolk Wolf'-type staters (*Ancient British Coins* (hereafter *ABC*) 1399: Cottam *et al.* 2010; cat. nos 234–55 and 259) and a further five found in the woodland (cat. nos 232–3 and 256–8). Coins of this type are distributed throughout the area of hoard deposition (see **Fig. 15.5**), but with a possible cluster of these staters and local silver coins about 30m from Hoard N.

The early British uninscribed gold coins from period 4 seem to be concentrated in an area about 20–30m radius from the location of Hoard C. The later East Anglian gold and most of the local silver seems to be concentrated more in the woodland area, possibly indicating a slight shift in the location of the later deposits, although later coins were still found in the main area of the hoards. A lump of what appears to be several silver East Anglian coins fused together (cat. no. 301) found about 10m away from Hoard N does seem to indicate a single deposit of coins in close physical association.

The metal-detected assemblage from the woodland contains a group of six British G quarter staters (*ABC* 2350; cat. nos 225–30), with two staters of the same class (*ABC* 2329; cat. nos 223–4) found in the excavation. The woodland assemblage also contains a group of six Gallo-Belgic D quarter staters that appear to have blobs of what may be molten silver or some other substance on their surface (cat. nos 204–8 and 210, **Fig. 15.6**). This has previously been noted by Talbot (2017, 110), who suggests that they are likely to have been part of the same deposit. It is not certain whether this is indicative of plated coins or evidence of pre-depositional treatment. Further analysis would be desirable. The same surface appearance can be seen on one of the Gallo-Belgic E coins from the site (cat. no. 203; the other, cat. no. 202, found almost 200m away, has almost entirely lost its plated surface). No analysis has been carried out on the plated coins, but the plated Insular Cf stater (cat. no. 213) found about 15m from Hoard B appears to have lost gold plate in the centre of its reverse, revealing a large circular patch of the underlying metal. The high proportion of such ancient forgeries from the site may suggest that they were deliberately selected for deposition in preference to genuine coins.

Another significant grouping consists of 34 'Kentish Primary' type potins (*ABC* 120, also known as the 'Thurrock' type, cat. nos 368–401) from the mid- to late 2nd century BC. The majority of these were found in the wooded area and probably represent a dispersed hoard. At least three potins (cat. nos 192–4) have since been reclassified by David Holman on the basis of their high weight and style as imported bronze units from the Greek colony of Massalia, the prototype on which Kentish Primary potins are based. These late 3rd to early 2nd-century BC coins were produced over a long period of time with a widespread distribution in southern coastal France and are likely to have reached Britain through long-distance networks along with the other Greek coins from the site. A number of the remaining Kentish Primary potins from the site are relatively high in weight but poorly preserved; they may benefit from further study after cleaning. Holman notes that:

> Of the certain potins, the more degraded varieties appear to be absent and they seem likely to be mostly, if not wholly from the earlier phases of the series.
>
> Kentish Primary potins are rare as stray finds in Norfolk and Marsden (2011) has noted that apart from Snettisham, the only other location in the county that has yielded them in any numbers is a site in the Waveney valley, a considerable distance away. The CCI and PAS databases between them list only four findspots of Kentish Primary potins (and only five findspots of Flat Linear potins). That so many have come from a small area at Snettisham, a location known for hoarding, suggests that many of them derive from a dispersed hoard of unknown size. Kentish Primary hoards are uncommon, only four certain ones being known: the very large Thurrock hoard (2,150 coins) and three much smaller hoards from Kent, all from near Folkestone (Folkestone (67 coins), Lyminge (77 coins) and Alkham (currently 235 coins). All of these hoards are larger than the putative Snettisham hoard. The distribution of single finds in addition to this cluster of hoards indicates a likely origin for the series in the east Kent region (Holman 2005, 36).

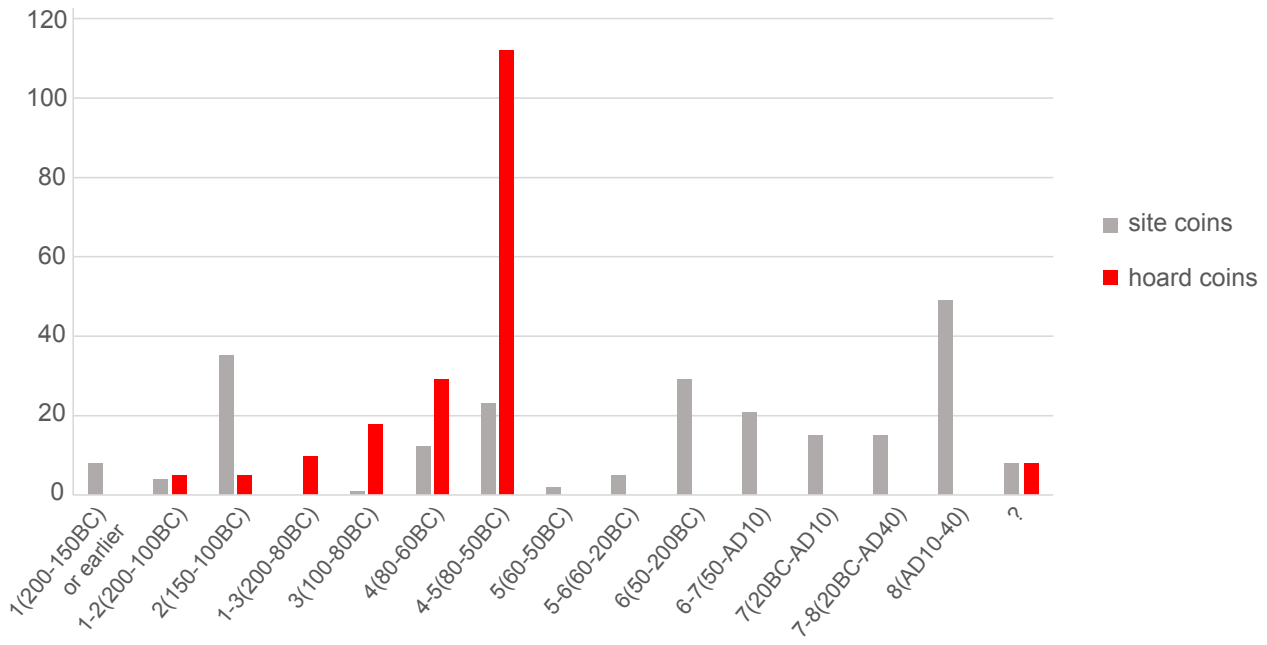


Figure 15.7 Number of Iron Age (and Greek) coins from the hoards and site by period of issue (excludes Hoard P)

Similar coins were in existence in the Paris Basin in the earlier 2nd century BC, although whether the British coins copied these, or were a separate development copying the prototype Massalia bronzes, which are also found in east Kent, has not been determined (Haselgrove 2006, 21). Although frustratingly elusive to confirm, what dating evidence there is for Kentish Primary potins also suggests an early date, probably starting no later than the mid-2nd century BC (*ibid.*, 19). They were probably superseded by the earliest Flat Linear potins by around 125 BC but that is far from certain and a later date is possible. Although these dates are much earlier than the principal Snettisham hoards, this does not preclude these coins having been deposited as a defined hoard at an early date. There is other earlier material from the site, as evidenced by radiocarbon dates obtained from organic remains associated with torcs in Hoards F and L, both of which gave dates no later than the 2nd century BC and quite possibly earlier [**Table 5.2**; Garrow *et al.* 2009]. However, Hoard F also included demonstrably later coins into the 1st century BC (see above). From this, the possibility that the Kentish Primary potins were also buried in this 'foreign' region at a date sometime after their period of issue should not be discounted.

Seven Flat Linear potins were also found at the excavation site during the 1990–2 excavations, and three of these were found in the area of Hoard C, perhaps outliers from this. David Holman has studied the eight potins from the site in the British Museum (seven Flat Linear and one Kentish Primary) and his identifications are included in the catalogue below. He writes:

> This small sample broadly reflects the contents of Hoard C, with coins of [Holman's] Group F again forming the principal component (see above). Three of these coins – cat. nos 403–4 and 408 – were found less than 10 metres from the location of Hoard C and, given the circumstances of the original discovery, must be regarded as likely strays from the hoard although in the absence of proof they have been kept separate from the hoard catalogue. The others – cat. nos 405–7 and 409 – are well scattered and were found between 30 and 55 metres north-east of Hoard C. Despite the greater distance, it is possible that these also derive from Hoard C, perhaps as plough scatter, although it will never be possible to be certain. One further Flat Linear potin (type F3/3-2, cat. no. 402) was found *c.* 2003 although the location of this coin within the field is unknown.

Discussion

The evidence from the Iron Age coinage thus suggests that the site was not abandoned after the phase which saw the deposition of the torc hoards (Phase 3 of activity at Snettisham, *c.* 350–60 BC), but continued in use for wider forms of depositional activity (see Chs 8–9). Talbot (2017, 110) posited that, 'The evidence is not suggestive of continuous deposition of Icenian coinage, and hoarding appears to be concentrated in three main phases: before local production started [pre-*c.* 60 BC], the end of Norfolk Wolf B stater production [*c.* 20 BC] and the revolt period [*c.* AD 60, represented by Hoard P], the latter two coinciding with wider episodes of Icenian coinage hoarding.' On the basis of the coin evidence, the end of the first of these phases around 60 BC (i.e. coinage period 4, Phase 3 in this volume) could plausibly account for the deposition of the gold hoards (B, E, F and N), the potin hoard (C) and perhaps smaller gold deposits from the woodland assemblage (**Fig. 15.7**). The limited stratigraphic evidence available to us does not indicate a similar intensity of hoard deposition in the intervening period prior to the deposition of the Bowl Hoard P (around AD 60, Phase 4 in this volume) but rather deposition of single coins and small hoards over an extended period with a more local focus to the coinage. This later phase accounts for the majority of the silver coinage deposited at the site, which can be seen to come mainly from East Anglia (**Fig. 15.8**). With the exception of plated coins, the base-metal coins are generally earlier, consisting of potins and Greek imports.

Since Haselgrove (1987) drew attention to the practice of multiple deposition of Iron Age coins and coin hoards at a

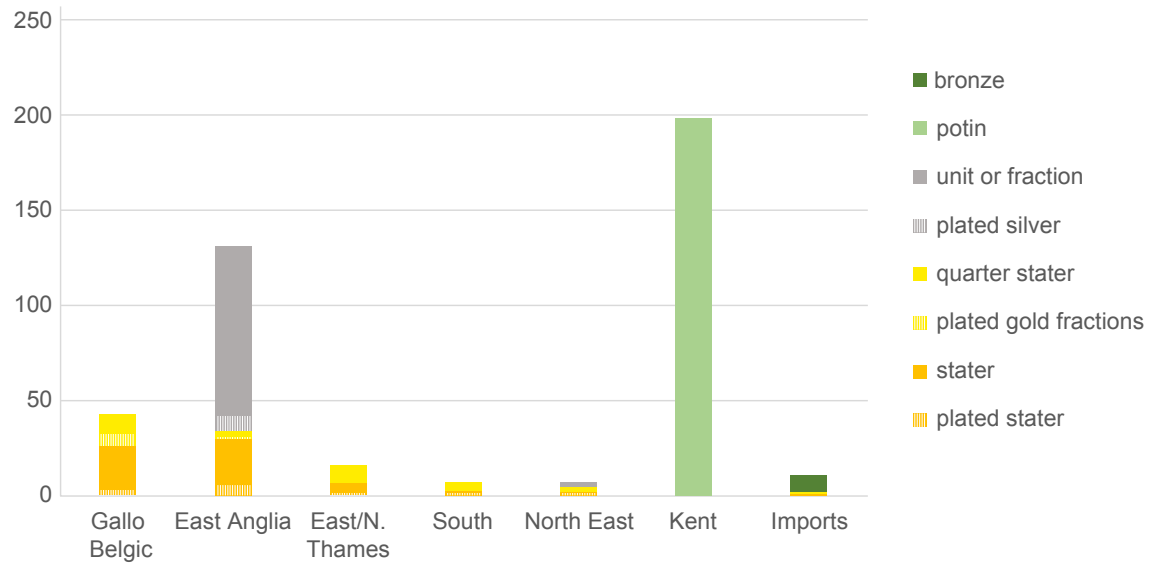


Figure 15.8 Number of Iron Age and Greek coins from the hoards and site by denomination and coin-producing region (excludes Hoard P)

single site, a number of such sites have undergone stratigraphic archaeological excavation. At Hallaton, Leicestershire (Leins 2007 and 2011), 14 distinct coin hoard deposits with similar composition were deposited in the entranceway to an enclosure in the mid-1st century AD; had the assemblage been ploughed out this patterning is unlikely to have been recognised in the numismatic record. The Roman temple sites at Wanborough, Surrey (Williams 2007), Harlow, Essex (Haselgrove 2005) and Hayling Island, Hampshire (King and Soffe 2001) all had earlier features that attracted Iron Age coin deposition, in hoards and as single finds. At other sites, such as Springhead, Kent (Andrews *et al.* 2011), Ashwell, Herts. (Jackson and Burleigh 2018) and Frensham, Surrey (Graham and Graham 2017), deposits of Iron Age coins are spatially separate from any Roman period foci, if they are present at all.

Comparative Norfolk sites that have undergone archaeological investigation are lacking. The assemblage from Fincham (de Jersey 2014, 285–90; Talbot 2017, 128) is also suggestive of cumulative deliberate deposition over an extended period of time, with the suggestive inclusion of coin blanks and droplets. However, that assemblage is predominantly silver and later in date, with the latest inscribed East Anglian types represented. The poorly understood assemblage from Welney (*ibid.*, 333–4) is more comparable to the early phase of hoarding at Snettisham, with Gallo-Belgic gold imports alongside uninscribed British gold. The assemblage from the 'Shernborne I and II' site discussed above also lacks archaeological investigation but appears to represent a concentrated deposit of similarly mixed Iron Age coinage with a long chronological range found adjacent to Early Roman coinage.

Part 3: Roman coins

The Roman coins are listed in Part 3 of the catalogue and derive from two groups:

- The 47 Roman coins from the British Museum excavations 1990–2 (registration numbers 1991,1018.12 to .19 and 2009,4213.28 to .66). None were found in securely stratified contexts, except for a group of four mid-4th-century AD coins found in the enclosure ditch in Trench 5 (cat. nos 471–3, 478; see **Fig. 9.5a**)
- The Roman coins metal-detected from the western area of the site between 2003 and 2007 (Treasure cases 2003 T169; 2005 T487 and 2007 T695), now in Norwich Castle Museum. These were not well-recorded at the time and are for the most part poorly preserved, although further identification may be possible in due course after cleaning.

The excavated and metal-detected assemblage contains a broad range of Roman coins (Part 3 of the catalogue), suggesting that the site was frequented to some extent throughout most of the Roman period. The 48 coins from the BM 1990–2 seasons contain two *denarii*, 31 1st to early 3rd-century *sestertii* and fractions, two 3rd-century radiates, nine 4th-century *nummi*, four 3rd to 4th-century base-metal coins and one further undated coin. The more recent metal-detected assemblage (from the wooded area to the west of the 'gold field') contains 35 further Roman coins and nine of uncertain date. This group is of broadly similar profile although it contains one Roman Republican *denarius* and two *nummi* of the Theodosian period. **Figure 15.9** shows the distribution of Roman coin finds in the 'gold field'. In terms of distribution, they are scattered more to the north of the area of dense Iron Age coin deposits with no obvious hoard deposits apart from the small cluster of four late Constantinian *nummi* from the enclosure ditch in Trench 5 (cat. nos 471–3, 478), the only securely stratified Roman coins.

When these assemblages are combined, there are 52 coins that can be put into a Reece period (one of the 21 periods of issue commonly used in analysis of Romano-British coinage, as set out by Reece (1968)) (**Fig. 15.10**), a number that is too small to make many significant conclusions, except to say that the bulk of the earlier coinage dates from the Flavian to the Antonine period (26 coins) and the later coinage peaks in the late 3rd century (9 radiates, including up to three of Carausius and some contemporary imitations) and the mid-4th century (14 mid- to late Constantinian *nummi* and contemporary copies). There are no clearly identifiable hoards within the group. The coins

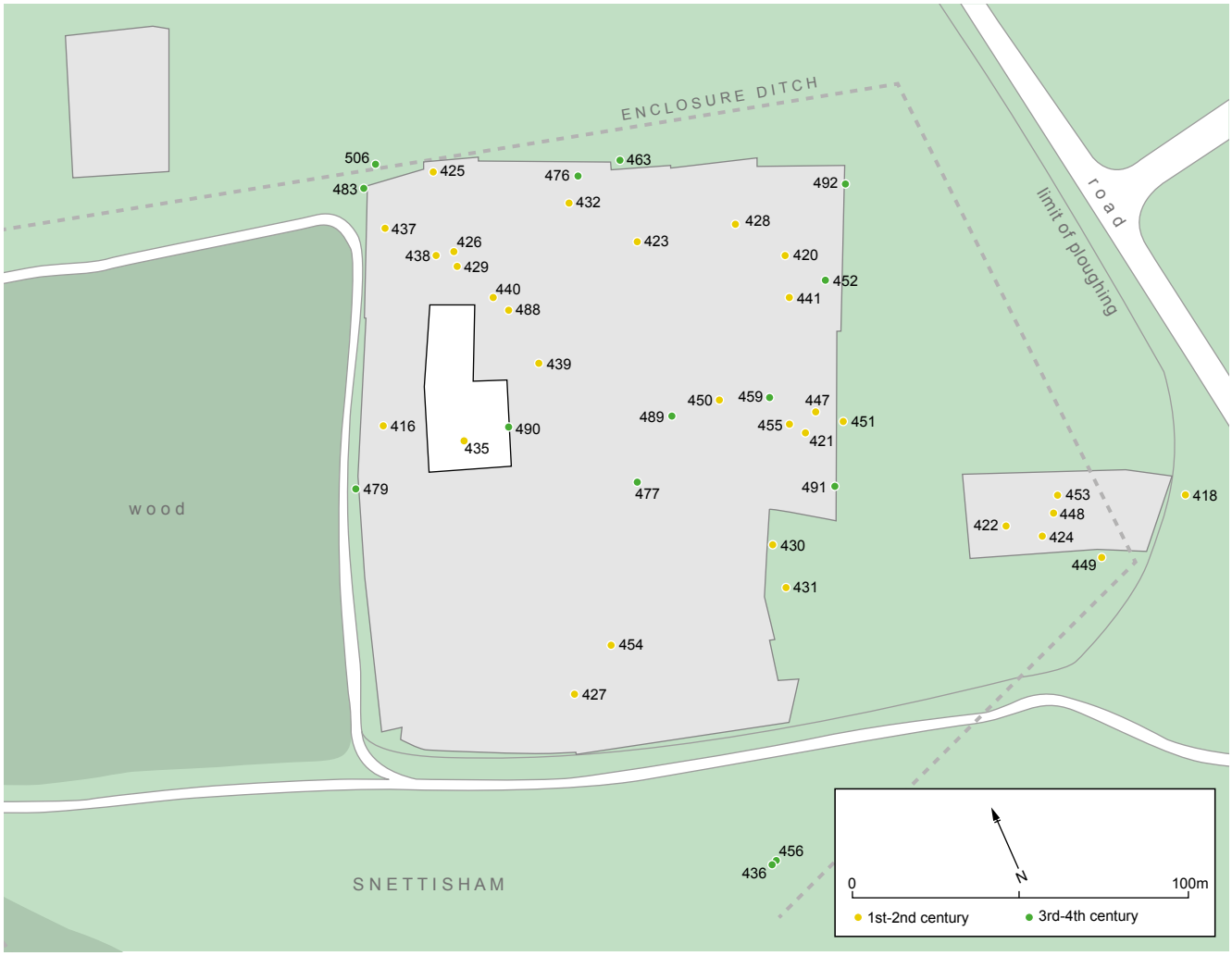
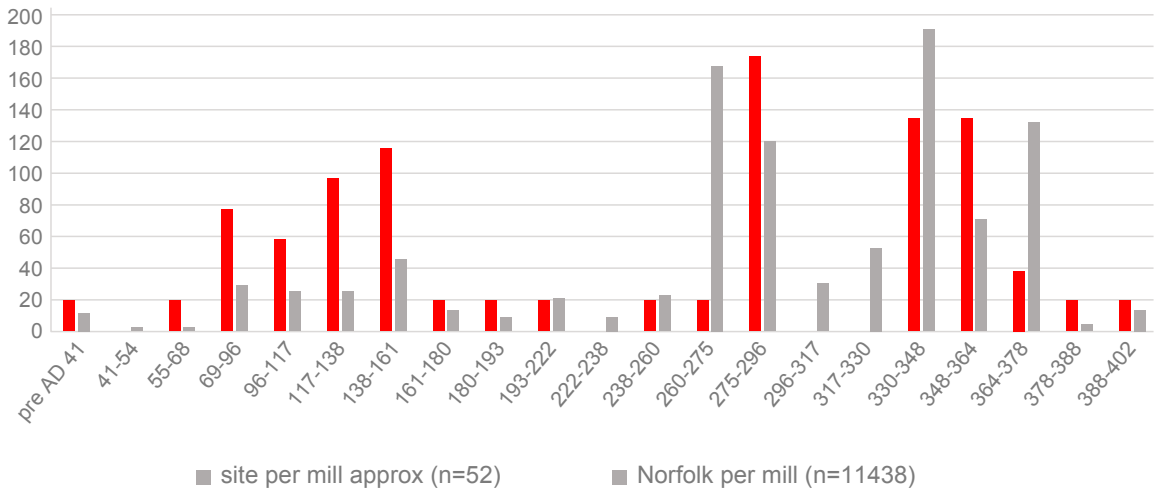


Figure 15.9 Distribution of Roman coins from the 'gold field'

that cannot be dated to a Reece period include three further Antonine coins (Reece periods 7 to 9).

Perhaps the most notable feature of the Roman assemblage is the lack of pre-Flavian coinage, represented only by a bronze of Nero and the Republican *denarius* of *c.* 81 BC. Although the inscribed East Anglian Iron Age units date to the first half of the 1st century AD, Roman coinage of this period is lacking, suggesting that the site had perhaps fallen out of use (at least in terms of coin deposition) by the period of the Roman conquest, or that only local coinage was deposited at that time. Talbot has suggested, regarding the absence of Republican *denarii*, it may be that Roman coins were being 'deliberately excluded from this highly important site [in the mid-first century AD], perhaps because they were viewed as

Figure 15.10 Roman coins from the site by their main period of production, compared to all Roman coinage from Norfolk listed on the PAS database (expressed per mill.)



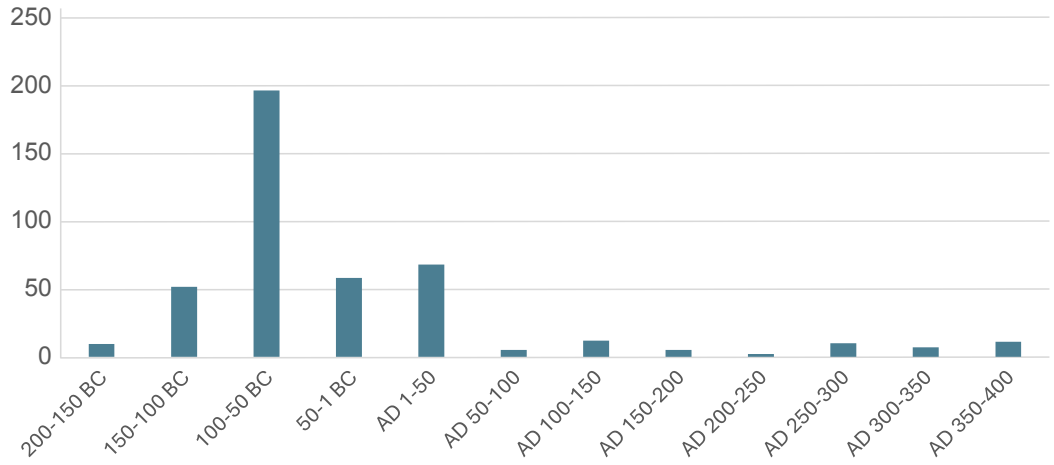


Figure 15.11 Approximate date of issue of Iron Age and Roman coins from Snettisham averaged over 50-year periods

being alien or barbarous' (Talbot 2017, 110). The absence of a clear understanding of the composition of Hoard P complicates this picture somewhat; it certainly seems that later and non-local inscribed coinage up to at least period 9 was present in this deposit (see de Jersey above). The presence of coinage at the site is more noticeable from the Flavian period, perhaps suggesting that this period of disuse was a temporary hiatus, though caution must be exercised in discussing a period of reduced supply. Antonine activity at the site could also be seen in the possible presence of recovered torc fragments in the Snettisham Jeweller's hoard (deposited after *c.* AD 154–61) (Ch. 3).

This nevertheless differs from the site at Hallaton, Leicestershire, where a phase of early gold coin deposition is followed by phases of 1st-century deposition of local silver, Eastern gold and a significant number of Roman Republican coins, with a Roman coin profile that is higher than the mean until the early 2nd century AD (Leins 2011, 43). It is also in marked contrast to Neronian hoard deposits from the southern part of the East Anglian coin-producing area that contained both *denarii* and local silver units, such as Eriswell (Kent and Burnett 1984) and Scole (Burnett 1986).

Later coins

It should be noted that the assemblage contains 42 medieval and later coins, tokens and medals (1991,1018.20 and .22; 2009,4213.67–96 and .105), spanning a range of dates from 1369 to 1988. Some of the items in this diverse assemblage could potentially have reached the site more recently, perhaps due to the spread of night soil or other material on the field from the settlement nearby (see Ch. 10 for discussion of post-medieval agricultural, drainage and landscaping work at the site).

The Snettisham coin assemblage: concluding remarks

Taken together, the Iron Age and Roman coin assemblages point to deposition of coinage at the site from the earliest period of Iron Age coin use in Britain through to the mid-1st century AD and beyond, with apparent peaks *c.* 60 BC (contemporary with at least some of the torc hoards), *c.* 20 BC, and from the pre-conquest period to *c.* AD 40, up to the final phase of Iron Age coin deposition represented by Hoard P, *c.* AD 60.

Despite the background pattern of continuity of use of the site for deposition represented by the single finds (a picture complicated by the apparent presence of scattered hoards within that assemblage), the hoard record suggests more sporadic moments of intense coin deposition at the site and notable absences should be considered. Gallo-Belgic E is not represented in the coin hoards and is only represented at the site as a whole by plated staters. Similarly, there is a lack of broadly contemporary local gold issues such as Norfolk Wolf A (*ABC* 1393), both of which are found in hoards from other North Norfolk sites (Talbot 2017, 111). The difficulty of providing absolute dating for the continental series in Britain has been alluded to above but the picture of more intense deposition of Gallo-Belgic C and D combined with the potin hoards points to a particular horizon of deposition around the end of Iron Age coin phase 4, *c.* 60 BC. This has been used to give a *terminus post quem* for the torc hoards (which contain a combination of coins of this phase and earlier examples with a potentially longer period of circulation prior to deposition). It is likely that the Greek coinage found at Snettisham reached Britain through the same long-distance networks as the continental Iron Age coinage and can therefore also be placed in this phase.

The bulk of the next phase of coin deposition involves Iron Age coinage of phases 6 to 8 (*c.* 50 BC to AD 40), perhaps the product of a longer period of more sporadic deposition of single finds with the exception of the suggested scattered hoard of Norfolk Wolf staters representing the peak around *c.* 20 BC. Whilst there are significant numbers of inscribed East Anglian silver coins found at the site, the Early Roman Imperial and Republican Roman *denarii* that were in circulation at the same time are notably absent (as noted by Talbot 2017, 110). Later inscribed Iron Age coinage from the Eastern (North Thames) region is also lacking from the assemblage. Given the presence of contemporary East Anglian coinage at the site this is perhaps surprising but may be a reflection of a wider change in orientation of regional networks in the early 1st century AD. This coinage reaches Suffolk in quantity but is rarely found in hoards from Norfolk, despite travelling far from its source (for example, the 79 coins of Cunobelin (period 8) found at Hallaton (Leins 2011, 39)). Apart from the potins, base metal coinage of Iron Age date is also lacking, in contrast to special deposits from

sites in the North Thames area such as Ashwell (Jackson and Burleigh 2018), which unlike Snettisham is within the normal zone of distribution for this coinage. In general, the character of the Iron Age coinage from Snettisham in the period after 60 BC is more local, with fewer long-distance imports (North-Eastern coinage being an exception in its wider area of distribution (Bland *et al.* 2020, 242)).

The so-called 'Bowl hoard' (Hoard P), sadly, was perhaps key to understanding aspects of the nature and function of coin deposition at the site but its archaeological context and circumstances of deposition are now lost to us. It cannot be discussed with the same degree of confidence as the extant assemblage but de Jersey's tentative reconstruction of the hoard (see above and section in catalogue, below) paints a picture of a very mixed assemblage of material not normally hoarded together; both uninscribed and inscribed gold and silver, up to the latest phase of East Anglian and North-Eastern coinage issued around the conquest period (AD 40s) and potentially as late as *c.* AD 60, as found in the 'Revolt period' hoards of East Anglia (Talbot 2017, 125). If Hoard P did represent a single deposit, it is possible that it constitutes redeposited material from the site or elsewhere in the vicinity, some of which may have been originally deposited in the phases not well-represented in the excavated and metal-detected assemblage.

The number of Roman coins in the assemblage is relatively high in the later part of the 1st century and into the mid-2nd century (**Fig. 15.10**), making it possible to argue for some degree of continuity of use of the site for coin deposition. Further conclusions based on the Roman coins must remain tentative given the small number identified, but the relative lack of coinage in the Severan period might suggest little activity in this period, though in keeping with the general pattern for Norfolk and nationally. This apparent hiatus is more pronounced in the period *c.* AD 260–74, a time of plentiful supply of debased radiates. For the later Roman period (i.e. debased radiates and *nummi* from *c.* AD 274 to the end of the Roman period) the pattern of coinage at Snettisham is more in keeping with the general background pattern of coinage for Norfolk and no significant activity can be assumed. Certainly, when the Roman coin assemblage is taken as a whole, any equivalent intensity of deposition to that of the Iron Age is lacking (**Fig. 15.11**).

In terms of the significance of the Iron Age coin assemblage, the variety of non-local and imported coins (**Fig. 15.8**) as well as the long period of deposition of coinage seems to indicate a place of pre-eminent importance for the region and beyond. It can perhaps be compared to assemblages from southern coastal sites such as Hengistbury Head, Selsey and West Wittering that also display diverse assemblages and (in the case of Hengistbury) a long period of deposition (Bland *et al.* 2020, 245). Unlike Hengistbury, direct evidence for coin production is lacking and the presence of hoard groups combining coins and personal items speaks to the significance of Snettisham for individual and communal ritualised deposition rather than a role primarily associated with economic activities such as the production, exchange or decommissioning of coinage (although these activities need not be mutually exclusive).

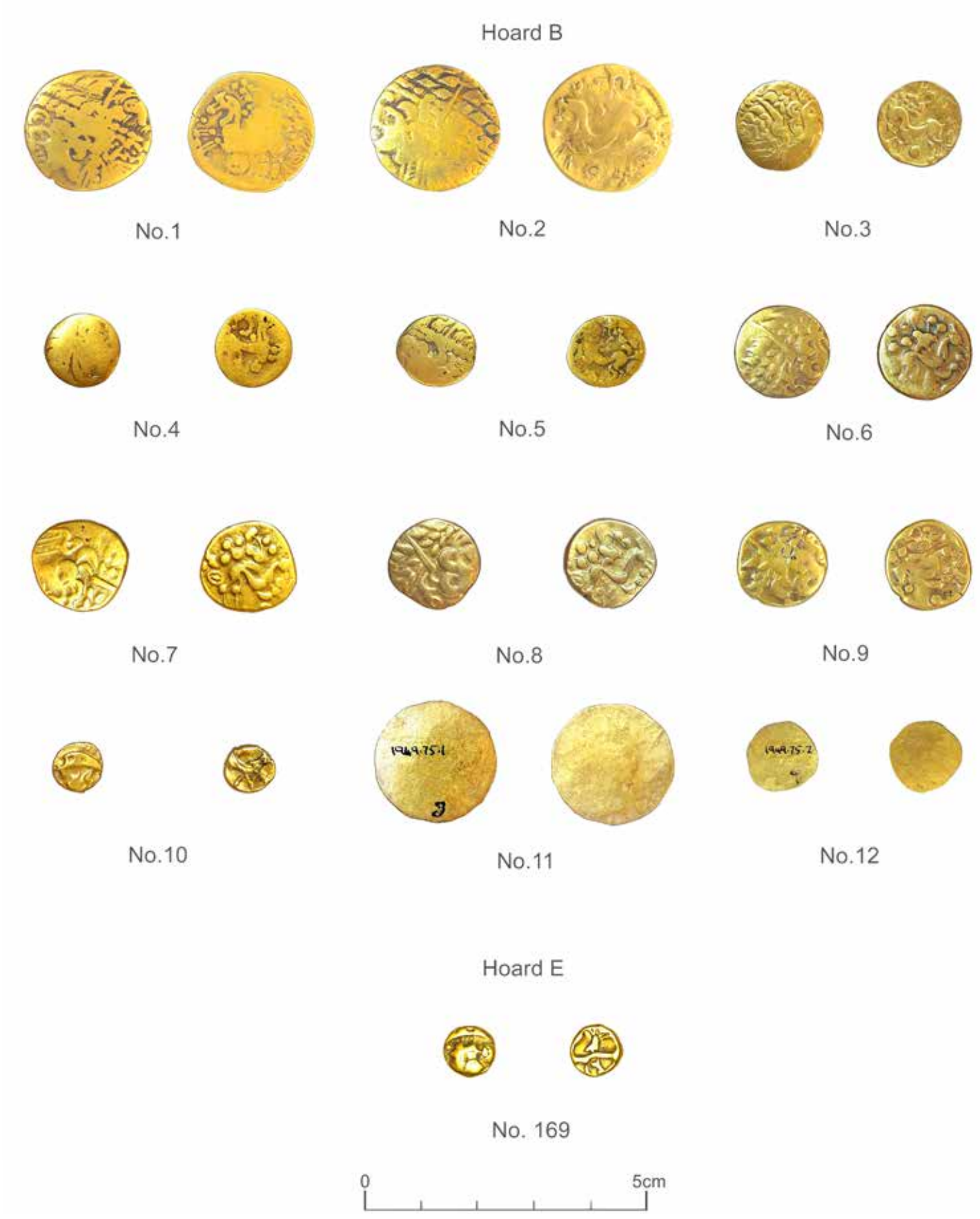


Plate 15.1 Iron Age Coins from Hoards B and E

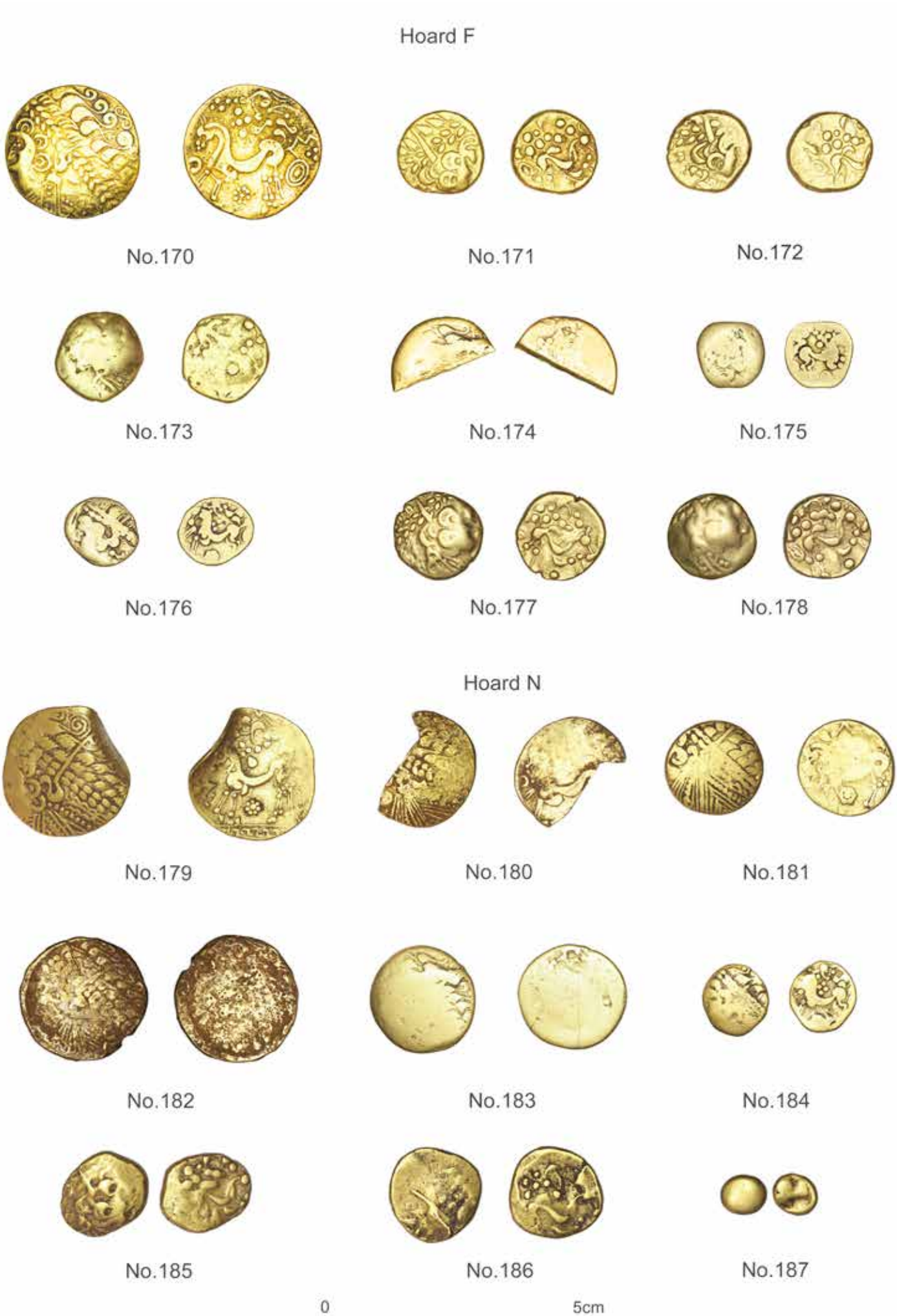


Plate 15.2 Iron Age coins from Hoards F and N

Catalogue of Coins

Notes

Eleanor Ghey

The catalogue uses *ABC* as the type reference for Iron Age coins, this being the most up-to-date work incorporating the numerous new types that have been discovered since the publication of Van Arsdell (1989) and Hobbs (1996). A full concordance of types is given in *ABC*.

For the Gallo-Belgic and early insular gold coinage, additional references to the typology used by Sills (2003 and 2017) is given. For East Anglian coinage, the terminology in Talbot 2017 is used.

Roman coins are phased by Reece periods (Reece 1968). The phasing used for the Iron Age coins is as below, taken from de Jersey 2014 (after Haselgrove 1993) and broadly consistent with *ABC*. Absolute chronology is a matter of debate and this is meant as a guide only. For the potins, Holman (2016, 11) gives approximate date ranges for subgroups:

Period 1 = 200–150 BC
Period 2 = 150–100 BC
Period 3 = 100–80 BC
Period 4 = 80–60 BC
Period 5 = 60–50 BC
Period 6 = 50–20 BC
Period 7 = 20 BC–AD 10
Period 8 = AD 10–40 very latest
Period 9 = AD 40–45
Period 10 = post-conquest

The majority of the NCM coins listed in Part II are from the 2003–9 Treasure cases (metal-detected in 2003–9, and processed as a number of different Treasure cases), though some identifications have been revised since the original cataloguing of the 2003–7 cases (reports submitted to HM Coroner in 2009 by the author and Ian Leins, with helpful assistance from Richard Abdy, Amelia Dowler and Sam Moorhead). The reference in the 'Reg. no.' column for these Treasure case coins (2003.1ff) is a reference number assigned during the cataloguing of these cases rather than their museum registration number. It was not possible to examine the 2009 T666 coins prior to publication and I am grateful to John Talbot for providing images and details of these. It was not always possible to match the Roman coins in NCM to their original identifications as they were not photographed at the time these Treasure reports were compiled and they could not all be re-examined.

Key to abbreviations used

ABC	*Ancient British Coinage* (Cottam *et al.* 2010)
Allen	Allen 1971
Axis	mould axis (for potins) expressed in degrees
BDW	Buckland, Dix and Wood
BMC	British Museum Catalogue (i.e. Hobbs 1996 for Iron Age coins, with volume no. for Roman coins)
BM reg. no.	British Museum Registration number
BN	Bibliothèque Nationale (Paris)
Boon	Boon 1988
CAN	Classical Numismatic Auction
CCI	Celtic Coin Index number
Clarke	Clarke 1954

CNG	Classical Numismatic Group
Cunetio	Besly and Bland 1983
Denom.	Denomination
Disc.	Discovery year and circumstances
Dolley	Dolley 1954
DT	Delestrée and Tache 2002–8
Exc.	Recovered during archaeological excavations
(i)	Irregular / imitation
(in ex.)	inscription positioned below the exergual line on the reverse of a coin
MBS	Mail Bid Sale
MD	Metal-detected
NCM	Norwich Castle Museum
NDA	No data available
NFA	Numismatic Fine Arts
OC	Obverse crossed
OP	Obverse parallel
PSL	Priced Stock List
RC	Reverse crossed
RP	Reverse parallel
Ref.	Reference
RIC	*Roman Imperial Coinage* (followed by volume number)
RRC	*Roman Republican Coinage* (Crawford 1974)
Scheers	Scheers 1977
SNC	Spink Numismatic Circular
SNG	*Sylloge Nummorum Graecorum*
Strs	Presence of striations on potins (background patterning caused by use of an agent, probably wood, to smooth the mould prior to manufacture): C = crossed, P = parallel, O = obverse, R = reverse.
Unc.	Uncertain
Wt	Weight in grammes

Part 1 IRON AGE COINS FROM THE HOARDS (Cat. nos 1–187)

Hoard B: Catalogue by Eleanor Ghey (Cat. nos 1–12; all in NCM)

All discovered during Rainbird Clarke's 1948 excavations (see Chs 2 and 4).

Gold staters and quarter staters

Cat. no.	NCM reg. no.	Obverse	Reverse	Denom.	*ABC*	Other refs[1]	Wt (g)	Period
1.	1949.76.1	Stylised head of Apollo, left	Stylised horse and chariot, left	stater	4	Ab1 Class 6; CCI 61.0297; Clarke no. 2	7.07	1–3
2.	1949.76.2	Stylised head of Apollo, left	Stylised horse and chariot, left	stater (possibly plated)	4	Ab1 Class 3b; CCI 61.0296; Clarke no. 1	5.38[2]	1–3
3.	1949.76.3	Stylised head of Apollo, right	Stylised horse, and chariot, left	quarter stater	28	Aa2 Class 3a; CCI 61.0289; Clarke no. 4	1.79	1–3
4.	1949.76.4	Stylised head of Apollo, right	Stylised horse, and chariot, right	quarter stater	28	Aa2 Class 5; CCI 61.0288; Clarke no. 6	1.52	1–3
5.	1949.76.6	Stylised head of Apollo, left	Stylised horse and chariot, left	quarter stater	31	Ab2 Class 3b; CCI 61.0303; Clarke no. 5	1.68	1–3
6.	1949.76.11	Stylised head of Apollo, right	Stylised horse, right	stater	13	Ca1 Class 3; CCI 61.0314; Clarke no. 8	6.23[3]	4
7.	1949.76.10	Stylised head of Apollo, right	Stylised horse, right	stater	13	Ca1 Class 3; CCI 61.0315; Clarke no. 10	6.48	4
8.	1949.76.8	Stylised head of Apollo, right	Stylised horse, right	stater	13	Ca1 Class 3; CCI 61.0316; Clarke no. 9	6.17[4]	4
9.	1949.76.9	Stylised head of Apollo, right	Stylised horse, right	stater	13	Ca1 Class 3; CCI 61.0317; Clarke no. 11	6.52[5]	4
10.	1949.76.12	Stylised animal	Abstract design	quarter stater	530	Insular Cf2 Class 1; CCI 61.0328; Clarke no. 12	1.50	4
11.	1949.75.1	Blank (hammered)	Blank (hammered)	stater	?	Uncertain type;[6] CCI 61.0286; Clarke no. 3	6.17	?
12.	1949.75.2	Blank (hammered)	Blank (hammered)	quarter stater	?	Uncertain type;[7] CCI 61.0285; Clarke no. 7	1.67	?

Hoard C: Catalogue by David Holman (Cat. nos 13–168)

All Flat Linear potins, in NCM. Types as per Holman 2016. All discovered during ploughing in 1948 (see Chs 2 and 4).

Cat. no.	Type	CCI no.	Dolley no.	Weight (g) * indicates incomplete coin	Circle diameter (mm)	Axis (degrees)	Strs	Comments
13.	B2/2-1c	61.0504		1.82	17.0	270		Allen E model (but there are no crescents in exergue)
14.	B2/4-1b	61.0503	46	2.11	16.5	90		Allen D3 model
15.	B3/2-4d	61.0491	9	1.73*	15.5–16.5	90		Chipped. Allen C3 model
16.	B3/2-5a	61.0492	8	2.24	17.0	90		Allen C4 model
17.	B2/2 or B3/2	–		0.59*	NDA	90		Fragment
18.	C2/1-1b	62.0152	10	2.17	16.5	270		Allen B model (eye pellet is a blemish in the flan, not part of design)
19.	C2/1-1	61.0511		1.81	16.5	270		
20.	C3/1-1a	61.0509		1.90	16.5	270		Allen F1 model
21.	C3/1-1	–		1.20*	NDA	270	RP	4 fragments; incomplete
22.	C3/1-2b	61.0524	2	1.87	16.5	90		Top of strip?
23.	C3/1-2b	61.0527		1.45	16.0	90	OP/RP	Striations very faint
24.	C3/1-2b	61.0528	3	1.87	17.5	270	OP/RP	Allen GB3 model
25.	C3/1-2b	61.0529	12?	1.78	16.5	90	OC/RC	
26.	C3/1-2d	61.0525		1.52*	16.0	90	OP/RP	Chipped. End of strip
27.	C3/1-2d	61.0526		1.93	16.5	90	OC/RC	
28.	C3/1-2d	–	11	1.66*	17.5	270	OP/RP	2 fragments; chipped.
29.	C3/1-2d	–		1.88*	NDA	90	RP	3 fragments; incomplete
30.	C3/1	–		0.94*	NDA	270	RP	2 fragments; incomplete
31.	C4/1-1b	–	21	1.55*	NDA	90	OP/RP	2 fragments; chipped
32.	D4/4-1b	61.0510	42	1.80	15.5	270		Allen F6 model
33.	D7/3-2b	61.0624	50	1.14	16.0	90		Weakly cast
34.	D7/3-2c	61.0608	48	1.71	15.5	90		
35.	D7/3-2d	61.0604	86	1.69	15.5	90		Appears to have been re-engraved
36.	E1/2-1b	–	6	1.39	15.5	90		2 fragments stuck together; complete
37.	E1/2-1b	–	5	1.73	16.0	90		
38.	E1/2-1	–		0.51*	NDA	90		Fragment
39.	E1/4-2a	61.0573	112	1.16	16.0	90		Allen J3 model. End of strip
40.	E1/4-2a	–	13	1.25*	16.0	90		2 fragments stuck together; chipped
41.	E1/4-2a or b	–	114?	1.51	15.5	90		2 fragments; complete
42.	E1/4-3a	61.0551	116	1.17	15.0	270		
43.	E2/2-1	61.0579	7	1.88	16.0	270		Obverse very weakly cast
44.	E3/3-2b	61.0585	97?	1.63	15.0–15.5	90		
45.	E3/4-1a	61.0557	45	1.93	15.5	270		Allen H1 model
46.	E3/4-2b	–	115?	1.40	NDA	270		5 fragments; complete. End of strip
47.	E3/4-2c	61.0576	43?	1.18*	15.0	270		Chipped, broken, repaired
48.	E3/4-2	–	44	1.60	15.5	270		3 fragments stuck together; complete
49.	E3/4-2	–		0.76*	15.5	270		Fragment. Reverse very weakly cast
50.	E4/4-2c	61.0577	113	1.76	15.0	90		Allen J4 model
51.	E1/4-3 or F1/3-1	61.0512		1.75	15.5	270		Reverse encrusted

Cat. no.	Type	CCI no.	Dolley no.	Weight (g) * indicates incomplete coin	Circle diameter (mm)	Axis (degrees)	Strs	Comments
52.	F1/3-2a	61.0571	54	1.16	15.0–15.5	270		
53.	F1/3-2a	61.0601	89	1.89	15.0	270		
54.	F1/3-2a	61.0606	56	1.29	15.5	270		
55.	F1/3-2a	61.0609	64	1.26	15.0–15.5	270		
56.	F1/3-2a	61.0621	60	1.42	14.0–15.0	270		
57.	F1/3-2a	61.0629	52	1.49	15.5	270		
58.	F1/3-2a	–		1.77*	NDA	270		5 fragments; chipped
59.	F1/3-2b	61.0598	53	1.43	14.5	270		End of strip
60.	F1/3-2b	61.0614	63	1.90	15.5	270		End of strip
61.	F1/3-4a	61.0572	62	1.53	15.0	270		Allen J7 model (but Allen's drawing is inaccurate)
62.	F1/3-4a	–	51	1.43	NDA	270		2 fragments; complete
63.	F1/3-4	–		1.14*	15.0–15.5	270		Chipped
64.	F2/2-2a	61.0639	15	1.79	15.0	90		
65.	F2/2-2a	61.0640	17	1.30	15.0–15.5	90		
66.	F2/2-2a	61.0641	16	1.79	15.0	90		
67.	F2/2-2a	61.0642	18	1.39	15.5	90		End of strip
68.	F2/2-2a	61.0643	19	1.56	15.5	90		End of strip
69.	F2/2-2a	61.0644	14	1.71	15.0–15.5	90		Allen L6 model
70.	F2/2-2a	–		1.47*	NDA	90		2 fragments; chipped
71.	F2/2-2	–		0.29*	NDA	90		Fragment
72.	F2/3-1c	61.0542	30	1.56	15.5	270		Weak obverse. End of strip
73.	F2/3-1c	61.0545	34	1.48	15.5	270		
74.	F2/3-1c	61.0547	32	1.83	16.0	270	OP	End of strip
75.	F2/3-1c?	–	38	1.67	NDA	90		4 fragments; complete
76.	F2/3-2a	61.0550	103	1.51	14.0–14.5	270		
77.	F2/3-2a	61.0586	85	1.76	14.5	270		Top of strip
78.	F2/3-2a	61.0587	27	1.18	14.5–15.0	270		
79.	F2/3-2a	61.0588	77	1.53	15.0	270		Broken and repaired
80.	F2/3-2a	61.0589	55	1.18	14.5	270		
81.	F2/3-2a	61.0590	88	2.26	15.0	270		Top of strip?
82.	F2/3-2a	61.0596	33	2.32	15.0	270		Irregular flan. Top of strip?
83.	F2/3-2a	61.0597	90	1.92	15.0	270		
84.	F2/3-2a	61.0603	101	1.31	15.0	270		
85.	F2/3-2a	61.0605	75	1.41	15.0	270		End of strip
86.	F2/3-2a	61.0607	83	1.94	15.0	270		Top of strip
87.	F2/3-2a	61.0610	92	2.04	14.5	270		Weakly cast
88.	F2/3-2a	61.0615	57	1.46	15.5	270		
89.	F2/3-2a	61.0627	91	1.94	15.0	270		End of strip
90.	F2/3-2a	–	76	1.27	15.0	270		End of strip
91.	F2/3-2a	–		0.91*	15.5	270		2 fragments; chipped
92.	F2/3-2a	–		1.11*	14.5	270		2 fragments; incomplete
93.	F2/3-2a	–		0.97*	NDA	270		3 fragments, 2 stuck together; incomplete
94.	F2/3-2a or b	–		0.61*	NDA	270		Fragment
95.	F1/3-2a or F2/3-2a	–		0.59*	NDA	270		2 fragments; incomplete
96.	F2/3-2b	61.0591		NDA	NDA	270		Obverse 61.0618 / reverse 61.0591
97.	F2/3-2b	61.0612	73	1.56	15.5	270		End of strip
98.	F2/3-2b	61.0613	95	1.62	15.0	270		

Cat. no.	Type	CCI no.	Dolley no.	Weight (g) * indicates incomplete coin(s)	Circle diameter (mm)	Axis (degrees)	Strs	Comments
99.	F2/3-2b	–	29	1.44	15.5	270		
100.	F2/3-2b	–		0.97*	15.5	270		Fragment.
101.	F2/3-1b or 2b	–		0.63*	NDA	270		2 fragments; incomplete
102.	F2/3-2c	61.0543	111?	1.71	15.5	270		
103.	F2/3-2c	61.0595	59	1.46	15.5	270		Allen L3 model
104.	F2/3-2c	61.0616	84	1.42	15.5	270		
105.	F2/3-2c	61.0618	58	1.57	15.5	270		Obverse 61.0631 / reverse 61.0618
106.	F2/3-2c	61.0620	39	1.81	15.5	270		
107.	F2/3-2c	61.0622	80	1.71	14.5	90		
108.	F2/3-2c	61.0623	98	1.82	15.0	90		
109.	F2/3-2c	61.0625	94	1.93	15.5	270		
110.	F2/3-2c	61.0626	68?	1.13	15.5	270		End of strip
111.	F2/3-2c	–	87	1.53*	15.5	270		Chipped. End of strip
112.	F2/3-2c	–		1.14*	15.5	270		Chipped. End of strip
113.	F2/3-2b or c	–		0.85*	15.5	270		Fragment
114.	F2/3-2d	61.0552	102	2.07	15.5	90		Obverse of unusual style
115.	F2/3-2d	61.0628	61	1.83	15.0	270		
116.	F2/3-2d	–	107	1.50	15.5	270		2 fragments; complete
117.	F2/3-2e	61.0549	79	1.34	15.0	90		
118.	F2/3-2e	61.0554	36	1.66	15.0	90		
119.	F2/3-2e?	61.0544	28	1.35	15.0	90		Weakly cast. Possibly a variant
120.	F2/3-2e?	61.0546	110	1.51	15.0–15.5	90		Corroded obverse
121.	F2/3-2e?	61.0592	31	1.44	14.5	90		End of strip
122.	F2/3-2f	61.0541	82	1.17	14.5	90		Holed (casting flaw).
123.	F2/3-2	–		1.33*	NDA	90		3 fragments stuck together; chipped. Obverse very weakly cast
124.	F2/3-2	–		0.80*	15.0	270		Fragment
125.	F2/3-2	–		1.05*	NDA	270		2 fragments; incomplete
126.	F2/3-2	–		0.92*	NDA	270		2 fragments; incomplete
127.	F2/3-2?	–		0.68*	NDA	270		Fragment
128.	F2/3-2?	–		0.56*	NDA	270		Fragment
129.	F2/3-1 or 2	–		0.65*	NDA	270		Fragment
130.	F2/3-4a	61.0583	105	1.24	15.0	270		Allen L2 model
131.	F2/3-4a	61.0617	24	1.94	15.5	90		
132.	F2/3-4c	61.0600	81	1.62	15.0	90		
133.	F2/3-7a	–		1.63*	15.5	270		Several fragments stuck together; chipped
134.	F2/3-8a	–	23	1.45	15.0	90		
135.	F2/3-9a	61.0599	66	1.59	15.0	90		End of strip
136.	F2/3-9a	61.0632	74	1.57	15.0	90		
137.	F2/3-9b	61.0593	70	1.29	15.0	90		End of strip
138.	F2/3-9b	61.0611	99	1.46	15.0	90		
139.	F2/3-9b	61.0631		NDA	NDA	90		Obverse 61.0630 / reverse 61.0631
140.	F2/3-10a	61.0548	26	1.31	15.0	90		Irregular flan
141.	F2/3-10a	61.0556	78	1.50	14.5	90		Allen H2 model
142.	F2/3-11a	61.0584	37	1.62	15.0	90		Allen L4 model
143.	F2/3-11a	61.0594	104	1.42	14.5–15.0	270		
144.	F2/3-11b	61.0540	100	1.96	15.0	90		

Cat. no.	Type	CCI no.	Dolley no.	Weight (g) * indicates incomplete coin	Circle diameter (mm)	Axis (degrees)	Strs	Comments
145.	F2/3-11c	61.0602	106	1.23	15.0	90		End of strip
146.	F2/3-11d	61.0553	49	1.68	15.0	90		
147.	F2/3-9 or 11	–		0.64*	NDA	90		Fragment
148.	F2/3	–		0.93*	NDA	90		3 fragments; incomplete
149.	F2/3	–		0.51*	NDA	270		2 fragments; incomplete
150.	F2/3	–		0.63*	NDA	270		2 fragments; incomplete
151.	F2/3	–		0.44*	NDA	270		Fragment
152.	F2/3	–		0.29*	NDA	270		Fragment
153.	F1/3 or F2/3	–		0.68*	NDA	270		Fragment
154.	F1/3 or F2/3	–		0.47*	NDA	270		Fragment
155.	F3/3-1a	61.0537	72	1.59	15.0	90		
156.	F3/3-1a	61.0538	35	1.49	15.5	90		Allen H3 model
157.	F3/3-1a	61.0539	109	1.38	15.0	90		
158.	F3/3-1a	61.0555	40	1.64	14.5	90		
159.	F3/3-2a	61.0619	67	1.76	14.5–15.0	90		
160.	F3/3-2a	61.0630	47	1.50	15.0	90		Reverse in CCI as 61.0630 but obverse not in CCI
161.	F	–		0.30*	NDA	Uncertain		2 fragments; incomplete
162.	F	–		0.24*	NDA	270		Fragment
163.	F	–		0.20*	NDA	Uncertain		Fragment
164.	D>F	–		0.94*	NDA	Uncertain		Fragment
165.	D>F	–		0.45*	NDA	270		Fragment
166.	D>F	–		0.71*	NDA	270		Fragment
167.	C>F	–		0.34*	NDA	Uncertain		Fragment
168.	*	–		12.20*	NDA	NDA	NDA	79 small fragments; unable to match

Hoard E: Catalogue by Eleanor Ghey (Cat. no. 169)

(In BM) Found within terminal of Great Torc, which was discovered during ploughing in 1950 (see Chs 2 and 4).

Southern British Insular Cf2 Class 1 gold quarter stater

Cat. no.	BM reg. no.	Obverse	Reverse	Denom.	*ABC*	Other refs	Wt (g)	Period
169.	1951,0507.1[8]	Stylised animal	Abstract design	quarter stater	530	Sills 2003, 376; 2017, 155. CCI 99.1801; Clarke no. 14	1.53	4

Hoard F: Catalogue by Eleanor Ghey (Cat. nos 170–8)

(All in BM) Found during metal-detecting by Charles Hodder in 1990 (see Chs 2, 4 and 12).

Presumably originally contained within the helmet which seems to have held all of Hoard F (F.445, see Ch. 12):
*Gallo-Belgic gold stater*s

Cat. no.	BM reg. no.	Obverse	Reverse	Denom.	*ABC*	Other refs	Wt (g)	Period
170.	1991,0904.1	Stylised head of Apollo, left	Stylised chariot, left	stater (possible ancient forgery)[9]	4	Sills 2003 Gallo-Belgic Ab1 Class 2; CCI 99.1799	7.09	1–3
171.	1991,0904.2	Stylised head of Apollo, right	Stylised horse, right	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 3; CCI 94.1701	6.58	4
172.	1991,0904.3	Stylised head of Apollo, right	Stylised horse, right	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 3; CCI 94.1700[10]	6.66	4
173.	1991,0904.4	Stylised head of Apollo, right	Stylised horse, right	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 3; CCI 94.1702	6.52	4

Found within tubular torc fragment (F.53):

Gallo-Belgic gold staters and quarter staters

Cat. no.	BM reg. no.	Obverse	Reverse	Denom.	*ABC*	Other refs	Wt (g)	Period
174.	1991,0904.5	Stylised head of Apollo, left	Stylised horse, left	stater (cut in half)	4	Sills 2003 Gallo-Belgic Ab1 Class 7; CCI 99.1798	3.38 (cut half)	1–3
175.	1991,0904.6	Stylised head of Apollo, right	Stylised horse, right	quarter stater	28	Sills 2003 Gallo-Belgic Aa2 Class 3b; CCI 99.1797	1.56	1–3
176.	1991,0904.7	Stylised head of Apollo, left	Stylised horse, left	quarter stater	31	Sills 2003 Gallo-Belgic Ab2 Class 3b; CCI 99.1800	1.69	1–3
177.	1991,0904.8	Stylised head of Apollo, right	Stylised horse, right	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 3; CCI 94.1698	6.68	4
178.	1991,0904.9	Stylised head of Apollo, right	Stylised horse, right	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 3; CCI 94.1699	6.65	4

Hoard N: Catalogue by Eleanor Ghey (Cat. nos 179–87)

(All in BM) Dispersed hoard excavated from topsoil/subsoil in 1990–1 (see Ch. 12).

Gallo-Belgic gold staters and quarter staters

Cat. no.	BM reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
179.	2009,4213.1	Stylised head of Apollo, left	Stylised horse, left	1991	Area 18	ST/AY	stater	4	Sills 2003 Gallo-Belgic Ab1 Class 3b	7.51 Bent flan	1–3
180.	2009,4213.2	Stylised head of Apollo, left	Stylised horse, left	1991	Area 18	ST/AZ	stater	4	Sills 2003 Gallo-Belgic Ab1 Class 2	3.84 The coin has been cut, removing part of the flan	1–3
181.	2009,4213.3	Stylised head of Apollo, left	Stylised horse, left	1991	Area 18	ST/BA	stater	4	Sills 2003 Gallo-Belgic Ab1 Class 6	5.38 Flan reduced in size	1–3
182.	2009,4213.4	Stylised head of Apollo, left	Stylised horse, left	1991	Area 18	ST/BE	stater	4	Sills 2003 Gallo-Belgic Ab1	5.84	1–3
183.	1991,1017.1	Stylised head of Apollo, left	Stylised horse, left	1990	Area 15[11]	SN/RP	stater	4	Sills 2003 Gallo-Belgic Ab1 Class 7; CCI 99.1998	6.73	1–3
184.	2009,4213.5	Stylised head of Apollo, left	Stylised horse, left	1991	Area 18	ST/BD	quarter stater	31	Sills 2003 Gallo-Belgic Ab2 Class 3b	1.63	1–3
185.	2009,4213.6	Stylised head of Apollo, right	Stylised horse, right	1991	Area 18	ST/AX	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 3	6.82	4
186.	2009,4213.7	Stylised head of Apollo, right	Stylised horse, right	1991	Area 18	ST/BC	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 4	6.49	4
187.	2009,4213.8	Blank	Abstract design (very heavily worn)	1991	Area 18	ST/BB	quarter stater	–	Gallo-Belgic Ca2[12] Class 3	1.57	4

Hoard P: Catalogue by Philip de Jersey

In the sections which follow, coins from the three groups outlined in the main coins chapter, believed to come from the Bowl Hoard, are listed with their identifications in *Ancient British Coins* (*ABC*) (Cottam *et al.* 2010), CCI numbers and weights (where known). Coins in groups A and C are numbered individually and information sources (generally auction catalogues) given in each case. Coins in group B are simply listed by the number of each type. As noted above, the listings for Hoard P are drawn from those already published as Hoard no. 196.6, in P. de Jersey (2014) *Coin Hoards in Iron Age Britain* (British Numismatic Society Special Publication no. 12). They are reproduced here for completeness, though of course due to its theft and dispersal in the trade, the hoard can never be fully reconstructed. As such the coins are not included in the catalogue numbering for this volume; the item numbers below are from de Jersey 2014.

A) LIKELY GOLD CONTENT

The following figures are based on the records of the CCI and the summary by Chadburn (2006, hoard 41). Although most of the inscribed gold has resurfaced in the trade since the discovery of the hoard, the uninscribed gold is much harder to identify. Many of these coins are undoubtedly recorded in the CCI but scarcely any have a confirmed association with the hoard.

East Anglia, uninscribed gold

6+ Snettisham staters, including:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
1	stater	1402	05.0041	5.63	NFA MBS 28, 23.4.1992, lot 913
2	stater	1408	97.0445	-	Stacks, NY, 8.12.1993, lot 2043
3	stater	1411	93.0226	5.64	SNC April 1993, no. 1643
4	stater	1411	96.3128	5.68	Dolphin PSL 2, 1992, no. 30
5	stater	1411	97.0444	5.45	NFA MBS 28, 23.4.1992, lot 914
6	stater	1411	08.9533	5.42	Elsen 14.3.1992, lot 25

Some Snettisham quarters, possibly including:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
7	quarter stater	1462	93.0318	1.51	Rudd 1993 list 8, no. 23
8	quarter stater	1462	94.0585	1.15	Rudd 1994 list 10, no. 13
9	quarter stater	1462	94.0617	1.07	Cummings June 1993, H14
10	quarter stater	1462	94.105	-	BDW 1.6.1994, lot 709
11	quarter stater	1462	96.1185	1.08	Gainor, Toronto, 25.9.1994, lot 2
12	quarter stater	1462	96.3127	1.11	Vecchi 2, 12.9.1996, lot 1086
13	quarter stater	1462	97.0785	-	Galata autumn 1991, no. 198
14	quarter stater	1462	97.0786	-	Galata autumn 1991, no. 203
15	quarter stater	1462	03.115	1.14	NFA MBS 28, 23.4.1992, lot 926
16	quarter stater	1462	04.0688	1.10	Colonial Rare Coins, Nov. 1993, no. 2078
17	quarter stater	1462	10.2355	1.10	NFA MBS 28, 23.4.1992, lot 911
18	quarter stater	1462	10.2482	1.12	Grün 30.10.1992, lot 1
19	quarter stater	1465	91.0311	1.14	Vecchi 2, 12.9.1996, lot 957

47+ Freckenham staters, including:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
20	stater	Unc.[13]			
21	stater	Unc.			
22	stater	1441	93.0599	5.38	*SNC* Oct. 1993, no. 7011
23	stater (plated)	1441	94.1325	2.86	Private coll.
24	stater	1441	01.0206	5.22	Münzen und Medaillen 566, June 1993, no. 24
25	stater	1441	03.0138	5.39	CNG 11.6.1994, lot 517
26	stater	1444	10.2372	5.33	NFA 28, 23.4.1992, lot 884
27	stater	1447	92.1086	5.37	Rudd 1993 list 7, no. 9
28	stater	1447	93.0114	5.48	*SNC* May 1991, no. 2684

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
29	stater (plated)	1447	93.0299	4.56	Rudd 1993 list 7, no. 10
30	stater	1447	94.0501	-	Private coll.
31	stater	1447	94.1025	5.38	BDW 1.6.1994, lot 680
32	stater	1447	99.0420	-	Dolphin 8, 1995/6, no. 34
33	stater	1447	08.9522	5.33	Kricheldorf 11.3.1992, lot 5
34	stater	1447	08.9523	-	Stacks, NY, 8.12.1993, lot 2041
35	stater	1447	08.9524	5.38	CNG 13.10.1992, lot 515
36	stater	1447	08.9525	-	Linzalone 19/1, spring 1996, no. 57
37	stater	1447	08.9526	-	Glendining 12.10.1992, lot 423
38	stater	1447	08.9527	-	Dolphin 10, winter 1996, no. 7
39	stater	1447	10.2376	-	Dolphin 6, 1995, no. 24
40	stater	1450	93.0190	-	Cummings March 1992, E11
41	stater	1450	93.0700	5.33	Private coll.
42	stater	1450	94.1022	5.37	BDW 1.6.1994, lot 676
43	stater	1450	94.1023	-	BDW 1.6.1994, lot 678
44	stater	1450	96.3043	5.34	Vecchi 2, 12.9.1996, lot 999
45	stater	1450	96.3044	5.35	Vecchi 2, 12.9.1996, lot 1000
46	stater	1450	97.1725	5.35	Glendining 12.10.1992, lot 422
47	stater	1450	99.0666	5.38	Lanz 26.11.1992, lot 19
48	stater	1450	08.8956	5.35	Münzen und Medaillen 547, Sept. 1991, no. 48
49	stater	1450	08.8957	5.38	Grün 9.11.1993, lot 88
50	stater	1450	08.8958	-	Stacks, NY, 8.12.1993, lot 2042
51	stater	1450	08.8959	-	Waddell 52, n.d., no. 1
52	stater	1450	08.8960	5.36	Münzen und Medaillen 554, May 1992, no. 65
53	stater	1450	08.8961	5.36	Kricheldorf 11.3.1992, lot 6
54	stater	1450	08.8963	5.37	Lanz 21.11.1991, lot 8
55	stater	1450	08.8964	-	Dolphin 2, 1992, no. 24
56	stater	1450	08.8965	5.39	Thirion, carnaval 1992, no. 2
57	stater	1450	08.8966	5.41	CNG 13.10.1992, lot 514
58	stater	1450	08.8967	5.35	Waddell 53, n.d., no. 1
59	stater (plated)	1450	10.2378	4.58	NFA 28, 23.4.1992, lot 885

31+ Irstead quarter staters, including:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
60	quarter stater	1471	93.0191	0.98	Cummings Feb. 1993, E27
61	quarter stater	1471	93.0395	1.04	Cummings June 1993, H23
62	quarter stater	1471	08.8983	1.03	Lanz 21.11.1991, lot 12
63	quarter stater	1471	08.8984	1.11	Münzen und Medaillen 549, Nov./Dec. 1991, no. 134
64	quarter stater	1474	95.0638	1.01	BDW 21.3.1995, lot 429 (ex Pheatt collection, bought 1991)
65	quarter stater	1474	95.3352	1.02	Private coll.
66	quarter stater	1474	95.3353	1.04	Private coll.
67	quarter stater	1474	08.8987	-	Cummings March 1992, E12
68	quarter stater	1474	08.8988	1.1	Christie's 13.10.1992, lot 111
69	quarter stater	1474	08.8989	1.0	Trenerry Nov./Dec. 1991, no. 81
70	quarter stater	1474	08.8990	1.1	Ponterio 20.1.1993, lot 72
71	quarter stater	1474	08.8992	1.04	CNG 13.10.1992, lot 516
72	quarter stater	1474	08.8994	-	Dolphin 2, 1992, no. 28
73	quarter stater	1474	08.8996	1.09	Lanz 21.11.1991, lot 9

de Jersey no.	Denom.	ABC	CCI number	Wt (g)	Information source
74	quarter stater	1474	08.8999	1.0	Berk 4.11.1992, lot 4
75	quarter stater	1474	08.9000	1.0	Berk 4.11.1992, lot 3
76	quarter stater	1474	0 8.9501	1.03	Berk 28.1.1993, lot 2
77	quarter stater	1474	08.9502	1.06	Münzen und Medaillen 549, Nov./Dec. 1991, no. 133
78	quarter stater	1474	08.9503	-	Cummings Sept. 1991, E17
79	quarter stater	1474	10.2341	-	Trenerry Oct. 1991, no. 94
80	quarter stater	1477	08.9518	1.03	Lanz 21.11.1991, lot 11
81	quarter stater	1477	08.9519	1.04	Münzen und M Medaillen 570, Nov./Dec. 1993, no. 211
82	quarter stater	1480	92.0978	1.13	*SNC* Dec. 1992, no. 7360
83	quarter stater	1480	92.1045	1.04	Rudd 1992 list 5, no. 17
84	quarter stater	1480	93.0077	1.10	*SNC* March 1992, no. 841
85	quarter stater	1480	94.0476	1.09	Rudd 1993 list 8, no. 24
86	quarter stater	1480	94.1027	-	BDW 1.6.1994, lot 682
87	quarter stater	1480	08.9506	1.11	Lanz 21.11.1991, lot 10
88	quarter stater	1480	08.9507	1.05	Münzen und Medaillen 547, Sept. 1991, no. 49
89	quarter stater	1480	08.9508	-	Galata autumn 1991, no. 208
90	quarter stater	1480	08.9509	1.05	CNG 2.9.1992, lot 910, 'near Tunbridge Wells' (catalogue note)

North Thames ('Trinovantes'), uninscribed gold[14]

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
91	stater	2338	92.0495	5.91	Rudd 1992 list 5, no. 46
92	stater	2338	92.0671	5.88	Rudd 1993 list 7, no. 39

East Anglia, inscribed gold

18 ANTED(I) staters, including:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
93	stater	1639	92.0431	5.39	Superior 11.12.1992, lot 2001
94	stater	1639	92.0543	5.40	*SNC* Dec. 1992, no. 7362
95	stater	1639	93.0148	5.34	Ex Stack, lot 136 (Van Arsdell 1992, 80)
96	stater	1639	94.1028	5.40	BDW 1.6.1994, lot 683
97	stater	1639	96.3066	5.37	Vecchi 2, 12.9.1996, lot 1023
98	stater	1639	98.1239	5.36	Valued History 6, Sept. 1997, no. 16
99	stater	1639	99.0667	5.34	NFA MBS 28, 23.4.1992, lot 890
100	stater	1639	99.1877	5.49	Davissons 12, 18.11.1999, lot 567
101	stater	1639	00.1646	5.41	Leu 79, 31.10.2000, lot 12
102	stater	1639	08.8504	5.38	Lanz 21.11.1991, lot 15
103	stater	1639	08.8505	5.39	Münzen und Medaillen 547, Sept. 1991, no. 50
104	stater	1639	08.8508	-	Dolphin 5, 1994, no. 6010
105	stater	1639	08.8802	-	Stacks 8.12.1993, lot 2044

5 ECEN staters:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
106	stater	1651	92.0610	5.23	Ex Stack, lot 137
107	stater	1651	94.1188	5.37	Private coll.
108	stater	1651	98.0387	5.31	Triton 10.1.2006, lot 665
109	stater	1651	00.0379	5.35	NFA MBS 23.4.1992, lot 891
110	stater	1651	08.8803	-	Stacks 8.12.1993, lot 2045

3 ECE staters:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
111	stater	1654	92.0611	5.34	Private coll.
112	stater	1654	93.0147	5.35	Leu 79, 31.10.2000, lot 13
113	stater	1654	00.0380	5.36	NFA MBS 23.4.1992, lot 892

North-Eastern, inscribed gold
some VEP CORF staters, including:

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
114	stater	1863	94.1185	4.97	Stacks 8.12.1993, lot 2047
115	stater	1854	94.1185	-	Private coll.

Chadburn (2006) dismissed reports of gold coins of Cunobelin in the hoard, but these rumours persist and seem to have some credibility. One classic type stater (*ABC* 2798, 5.50g) is recorded in the CCI from a usually reliable source (CCI 95.3387). However, it is unclear exactly how many were present, and whether they were predominantly staters or quarter staters.
Total (in CCI): 113 +

B) PARCEL OF 1135 SILVER COINS (CCI 95.1460–2594)[15]

Contents:
East Anglia, uninscribed silver

Number of coins	Denom.	Type	*ABC*	CCI numbers
2	unit	boar/horse A	1576	95.2001–2
11	unit	boar/horse B	1579	95.2003–13
47	unit	boar/horse C	1582	95.2014–60
74	unit	normal face/horse A	1564	95.2061–73, 2075–101, 2103–8, 2110–27, 2129–38
277	unit	normal face/horse B/C	1567	95.2074, 2102, 2109, 2128, 2139–411
12	unit	normal face/horse uncertain	1564/1567	95.2412–23
20	unit	early pattern/horse A	1588	95.1723, 2424–41, 2572
12	unit	early pattern/horse B	1591	95.2442–53
1	half-unit	early pattern/horse	1627	95.2591

East Anglia, inscribed silver

Number of coins	Denom.	Type	*ABC*	CCI numbers
153	unit	ANTED(I)	1642/1645	95.1604–18, 1620–1702, 1890, 1910, 1912, 1950, 1962, 1965, 1990–1, 1996, 2454–86, 2488–91, 2556, 2560–1, 2563–4, 2570, 2573, 2577, 2585
115	unit	ECEN	1657	95.1725, 1739–1819, 1821, 1823, 1825–6, 1831–4, 1843, 1868, 1878, 1881, 1919, 1930, 1953, 1968–9, 1972, 1986–7, 1992–5, 1998–2000, 2487, 2567, 2574, 2578–80
40	unit	ED(N)	1672	95.1619, 1703–21, 2492–511
14	unit	symbol	1678 / 1681	95.1724, 1726–38
146	unit	ECEN/ED(N)		95.1820, 1822, 1824, 1827–30, 1835–42, 1844–67, 1869–77, 1879–80, 1882–9, 1891–903, 1905–9, 1911, 1913–18, 1920–9, 1931–49, 1951–2, 1954–7, 1959–61, 1963–4, 1966–7, 1970–1, 1973–85, 1988, 2512–16
87	unit	ECE A	1660	95.1527–58, 1560–87, 2517–22, 2525–44, 2559

Number of coins	Denom.	Type	*ABC*	CCI numbers
88	unit	ECE B	1666	95.1460–526, 1559, 1602–3, 1997, 2523–4, 2557–8, 2562, 2565–6, 2568–9, 2571, 2575–6, 2581–2, 2584, 2586–7
25	unit	ECE B reversed	1669	95.1588–601, 2545–55
2	unit	AESV	1702	95.1722, 1904
1	unit	SAENV/ECEN mule[16]		95.1958
5	unit	pattern/horse unclassified		95.1989, 2583, 2588–90
1	half-unit	pattern/horse unclassified		95.2592

North-Eastern silver, uninscribed

Number of coins	Denom.	Type	*ABC*	CCI numbers
1	half-unit		1833	95.2593

North-Eastern silver, inscribed

Number of coins	Denom.	Type	*ABC*	CCI numbers
1	half-unit	VEP CORF	1902	95.2594

Total (in CCI): 1135 +

C) OTHER COINS IN THE CCI

East Anglia, uninscribed silver units[17]

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
1	unit	1522	96.3060	1.15	Vecchi 2, 12.9.1996, lot 1017
2	unit	1522	96.3062	1.56	Vecchi 2, 12.9.1996, lot 1019
3	unit	1522	96.3063	1.10	Vecchi 2, 12.9.1996, lot 1020
4	unit	1522	01.0297	1.10	Private collection
5	unit	1531	97.0840	-	Private coll.ection
6	unit	1537	92.0557	1.20	Rudd 1992 list 3, no. 16
7	unit	1525	92.0486	0.91	Rudd 1992 list 5, no. 21
8	unit	1525	94.0608	1.22	Rudd 1994 list 11, no. 61
9	unit	1525	94.0609	1.38	Rudd 1994 list 11, no. 60
10	unit	1525	94.0610	1.32	Rudd 1994 list 11, no. 59
11	unit	1525	94.0611	1.00	Rudd 1993 list 9, no. 30
12	unit	1525	94.0614	1.47	Rudd 1994 list 13, no. 81
13	unit	1525	96.3049	1.37	Vecchi 2, 12.9.1996, lot 1006
14	unit	1525	96.3050	1.15	Vecchi 2, 12.9.1996, lot 1007
15	unit	1525	96.3051	1.28	Vecchi 2, 12.9.1996, lot 1008
16	unit	1525	96.3054	1.28	Vecchi 2, 12.9.1996, lot 1011
17	unit	1525	96.3056	1.22	Vecchi 2, 12.9.1996, lot 1013
18	unit	1525	96.3057	1.29	Vecchi 2, 12.9.1996, lot 1014
19	unit	1525	96.3058	1.23	Vecchi 2, 12.9.1996, lot 1015
20	unit	1525	96.3059	1.35	Vecchi 2, 12.9.1996, lot 1016
21	unit	1525	96.3061	1.36	Vecchi 2, 12.9.1996, lot 1018
22	unit	1525	97.0841	-	Private collection
23	unit	1525	01.0270	1.20	Private collection
24	unit	1525	01.0289	1.20	Private collection
25	unit (plated)	1525	01.0291	1.60	Private collection
26	unit	1510	96.3052	1.36	Vecchi 2, 12.9.1996, lot 1009
27	unit	1510	96.3053	1.38	Vecchi 2, 12.9.1996, lot 1010
28	unit	1561	96.3055	1.05	Vecchi 2, 12.9.1996, lot 1012
29	unit	1588	92.0334	1.14	Birmingham 1993 C388, ex Finney

de Jersey no.	Denom.	*ABC*	CCi number	Wt (g)	Information source
30	unit	1588	93.0302	1.14	Rudd 1993 list 7, no. 17
31	unit	1588	94.1554	1.18	SNC Dec. 1994, no. 7799
32	unit	1588	96.3065	1.20	Vecchi 2, 12.9.1996, lot 1022
33	unit	1588	97.0842	-	Private coll.
34	unit	1588	97.0843	-	Private coll.
35	unit	1591	95.1114	1.18	Private coll.
36	unit	1591	96.3064	1.13	Vecchi 2, 12.9.1996, lot 1021
37	unit	1591	97.0844	-	Private coll.
38	unit	1591	97.0845	-	Private coll.
39	unit	1591	09.4551	-	Berk 75, 28.1.1993, lot 64
40	unit	1591	09.4552	-	Berk 75, 28.1.1993, lot 65
41	unit	1591	09.4554	-	Berk 76, 21.4.1993, lot 132
42	unit	1591	09.4561	1.2	Berk 4.11.1992, lot 56
43	unit	1591	09.4562	-	Berk 4.8.1992, lot 63
44	unit	1591	09.4563	-	Berk 4.8.1992, lot 62
45	unit	1591	09.4566	-	CNA 14, 20.3.1991, lot 1259
46	unit	1591	09.4567	-	Cummings summer 1992, E14
47	unit	1591	09.5206	-	Trenerry summer 1991, no. 99
48	unit	1591	09.5207	-	Trenerry Feb./March 1992, no. 82
49	unit	1591	09.5208	-	Trenerry Xmas 1991, no. 93
50	unit	1591	09.5209	-	Trenerry Nov./Dec. 1991, no. 86
51	unit	1591	09.5299	-	Pegasi 78, 1993, no. 250
52	unit	1573	94.0533	1.13	Rudd 1993 list 9, no. 33
53	unit	1573	09.4571	-	Goodwin 86, summer 1991, no. 6
54	unit	1576	95.3359	1.07	Private coll.
55	unit	1576	95.3381	1.08	Private coll.
56	unit	1576	97.0846	-	Private coll.
57	unit	1579	94.0055	1.21	Private coll.
58	unit	1579	95.3358	1.17	Private coll.
59	unit	1579	95.3380	0.80	Private coll.
60	unit	1579	97.0847	-	Private coll.
61	unit	1579	97.0848	-	Private coll.
62	unit	1579	97.0849	-	Private coll.
63	unit	1579	97.0850	-	Private coll.
64	unit	1579	09.4581	-	Berk 75, 28.1.1993, lot 61
65	unit	1579	09.4586	-	Cummings March 1992, E14
66	unit	1582	94.0056	1.18	Private coll.
67	unit	1582	94.0057	1.20	Private coll.
68	unit	1582	94.0058	1.06	Private coll.
69	unit	1582	94.0481	-	Rudd (not in lists)
70	unit	1582	94.0511	-	Rudd (not in lists)
71	unit	1582	94.0512	1.15	Rudd 1994 list 10, no. 15
72	unit	1582	94.0513	-	Rudd (not in lists)
73	unit	1582	94.0514	1.16	Rudd 1993 list 9, no. 34
74	unit	1582	95.1112	1.20	Private coll.
75	unit	1582	95.3360	1.22	Private coll.
76	unit	1582	96.3047	0.99	Vecchi 2, 12.9.1996, lot 1004
77	unit	1582	97.0851	-	Private coll.
78	unit	1582	97.0852	-	Private coll.
79	unit	1582	97.0853	-	Private coll.
80	unit	1582	97.0854	-	Private coll.

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
81	unit	1582	03.0360	1.22	Rudd 2003 Liz's list 5, no. 31
82	unit	1582	09.4591	-	Dolphin 2, 1992, no. 37
83	unit	1582	09.4592	-	Cummings Sept. 1991, E20
84	unit	1582	09.4595	-	Berk 75, 28.1.1993, lot 63
85	unit	1582	09.4596	=	Berk 75, 28.1.1993, lot 62
86	unit	1582	09.4598	0.93	NFA MBS 28, 23.4.1992, lot 887
87	unit	1582	09.4606	-	CNA 14, 20.3.1991, lot 1258
88	unit	1582	09.4608	1.20	Thirion autumn 1992, no. 3
89	unit	1582	09.5220	-	Trenerry Oct./Nov. 1992, no. 83
90	unit	1582	09.5221	-	Trenerry Oct. 1991, no. 96
91	unit	1582	09.5222	-	Trenerry Feb./March 1993, no. 64
92	unit	1582	09.5223		Trenerry summer 1993, no. 64
93	unit	1582	09.5224	-	Trenerry June 1993, no. 88
94	unit	1582	09.5226	-	Trenerry Xmas 1991, no. 86
95	unit	1582	09.5231	-	Trenerry March/April 1992, no. 97
96	unit	1582	09.5232	-	Trenerry Feb./March 1992, no. 77
97	unit	1582	09.5316	-	Stacks 8.12.1993, lot 2053
98	unit	1564	94.0515	1.18	Rudd 1993 list 9, no. 47
99	unit	1564	94.0518	-	Rudd 1994 list 10, no. 27
100	unit	1564	95.3361	1.20	Private coll.
101	unit	1564	95.3362	1.17	Private coll.
102	unit	1564	97.0856	-	Private coll.
103	unit	1567	94.0516	1.17	Rudd 1993 list 9, no. 46
104	unit	1567	94.0555	-	Rudd (not in lists)
105	unit	1567	94.0556	1.22	Rudd 1994 list 10, no. 26
106	unit	1567	94.0763	1.28	Rudd 1995 list 15, no. 29
107	unit	1567	95.0701	1.29	Private coll.
108	unit	1567	96.3087	1.27	Vecchi 2, 12.9.1996, lot 1044
109	unit	1567	96.3088	1.21	Vecchi 2, 12.9.1996, lot 1045
110	unit	1567	96.3089	1.25	Vecchi 2, 12.9.1996, lot 1046
111	unit	1567	97.0857	-	Private coll.
112	unit	1567	03.0251	1.25	Rudd 2003 list 69, no. 29
113	unit	1567	03.0642	1.28	Rudd 2003 list 72, no. 42

East Anglia, uninscribed silver half-units

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
114	half-unit	Unc. boar/horse	93.0987	0.36	Birmingham 1993 C406, ex Finney
115	half-unit	1621	96.3106	0.62	Vecchi 2, 12.9.1996, lot 1064

East Anglia, silver units inscribed CAN DVRO

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
116	unit	1630	94.0482	1.23	Rudd 1993 list 8, no. 26 (wrong rev. photo)
117	unit	1630	94.0525	1.16	Rudd 1993 list 9, no. 35
118	unit	1630	94.0545	-	Ritter 33, Dec. 1992, no. 304
119	unit	1630	95.1165	1.21	Private coll.
120	unit	1630	96.3048	1.20	Vecchi 2, 12.9.1996, lot 1005
121	unit	1630	97.0855	-	Private coll.
122	unit	1630	09.4618	-	Dolphin 2, 1992, no. 39
123	unit	1630	09.4622	1.24	CNA 25.3.1992, lot 1163
124	unit	1630	09.4623	-	Dolphin 5, 1994, no. 6028

East Anglia, silver units inscribed ANTED(I)

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
125	unit	1642/1645	93.0400	1.01	Cummings June 1993, H29
126	unit	1642/1645	93.0668	1.15	Private coll.
127	unit	1642/1645	95.3403	1.10	Private coll.
128	unit	1642/1645	96.1202	1.17	Private coll.
129	unit	1642/1645	96.1210	1.13	Private coll.
130	unit	1642/1645	96.1211	1.25	Private coll.
131	unit	1642/1645	96.1213	1.19	Private coll.
132	unit	1642/1645	96.1221	1.20	Private coll.
133	unit	1642/1645	96.1228	1.25	Private coll.
134	unit	1642/1645	96.1229	1.14	Private coll.
135	unit	1642/1645	96.1230	1.17	Private coll.
136	unit	1642/1645	96.1231	1.29	Private coll.
137	unit	1642/1645	96.3067	1.22	Vecchi 2, 12.9.1996, lot 1024
138	unit	1642/1645	96.3068	1.16	Vecchi 2, 12.9.1996, lot 1025
139	unit	1642/1645	97.0858	-	Private coll.
140	unit	1642/1645	97.0859	-	Private coll.
141	unit	1642/1645	97.0860	-	Private coll.
142	unit	1642/1645	97.0861	-	Private coll.
143	unit	1642/1645	97.0862	-	Private coll.
144	unit	1642/1645	97.0863	-	Private coll.
145	unit	1642/1645	97.0864	-	Private coll.
146	unit	1642/1645	97.0884	-	Private coll.
147	unit	1642/1645	97.0887	-	Private coll.
148	unit	1642/1645	98.1382	1.18	Rudd 1998 list 36, no. 16
149	unit	1642/1645	98.1383	1.21	Rudd 1998 list 36, no. 17
150	unit	1642/1645	04.2407	1.20	Rudd 2004 Liz's list 14, no. 33

East Anglia, silver units inscribed ECEN

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
151	unit	1657	93.0615	1.25	Private coll.
152	unit	1657	93.0677	1.23	Private coll.
153	unit	1657	94.0529	-	Rudd 1993 list 9, no. 39
154	unit	1657	94.0543	-	Rudd 1993 list 9, no. 38
155	unit	1657	94.0544	1.25	Rudd 1994 list 10, no. 19
156	unit	1657	94.0586	-	Rudd 1994 list 10, no. 20
157	unit	1657	96.1204	1.21	Private coll.
158	unit	1657	96.1205	1.18	Private coll.
159	unit	1657	96.1208	1.14	Private coll.
160	unit	1657	96.1215	1.29	Private coll.
161	unit	1657	96.1218	1.26	Private coll.
162	unit	1657	96.1225	1.12	Private coll.
163	unit	1657	96.3069	1.20	Vecchi 2, 12.9.1996, lot 1026
164	unit	1657	96.3070	1.14	Vecchi 2, 12.9.1996, lot 1027
165	unit	1657	96.3071	1.24	Vecchi 2, 12.9.1996, lot 1028
166	unit	1657	97.0865	-	Private coll.
167	unit	1657	97.0866	-	Private coll.
168	unit	1657	97.0867	-	Private coll.
169	unit	1657	97.0885	-	Private coll.
170	unit	1657	97.0886	-	Private coll.
171	unit	1657	98.1384	1.25	Rudd 1998 list 36, no. 19

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
172	unit	1657	98.1385	1.16	Rudd 1998 list 36, no. 18
173	unit	1657	98.1390	1.26	Rudd 1998 list 36, no. 24
174	unit	1657	02.0088	1.25	Rudd 2002 list 62, no. 42

East Anglia, silver units inscribed ED(N)

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
175	unit	1672/1675	94.0538	1.25	Rudd 1994 list 10, no. 21
176	unit	1672/1675	94.0549	1.25	Rudd 1993 list 9, no. 43
177	unit	1672/1675	94.0551	1.26	Rudd 1995 list 15, no. 55
178	unit	1672/1675	94.0552	1.27	Rudd 1994 list 13, no. 43
179	unit	1672/1675	94.0553	-	Rudd 1994 list 10, no. 23
180	unit	1672/1675	94.0554	1.21	Rudd 1994 list 10, no. 24
181	unit	1672/1675	96.1203	1.23	Private coll.
182	unit	1672/1675	96.1207	1.27	Private coll.
183	unit	1672/1675	96.1217	1.27	Private coll.
184	unit	1672/1675	96.1224	1.26	Private coll.
185	unit	1672/1675	98.1386	1.23	Rudd 1998 list 36, no. 20
186	unit	1672/1675	99.1591	1.24	Rudd 1999 list 47, no. 60

East Anglia, symbol type inscribed silver units

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
187	unit	1678/1681	96.1227	1.18	Private coll.
188	unit	1678/1681	96.3074	0.77	Vecchi 2, 12.9.1996, lot 1031
189	unit	1678/1681	97.0874	-	Private coll.
190	unit	1678/1681	97.0875	-	Private coll.

East Anglia, silver units inscribed ECEN *or* ED(N)

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
191	unit		94.0541	1.28	Rudd 1993 list 9, no. 37
192	unit		96.3073	1.27	Vecchi 2, 12.9.1996, lot 1030
193	unit		97.0871	-	Private coll.
194	unit		97.0872	-	Private coll.
195	unit		97.0873	-	Private coll.
196	unit		98.1387	1.21	Rudd 1998 list 36, no. 21

East Anglia, silver units inscribed ECE

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
197	unit	1660	93.0678	1.26	Private coll.
198	unit	1660	93.1000	1.25	Birmingham, ex Finney, ex Dolphin
199	unit	1660	94.0540	1.21	Rudd 1993 list 9, no. 41
200	unit	1660	96.1206	1.15	Private coll.
201	unit	1660	96.1209	1.26	Private coll.
202	unit	1660	96.1226	1.26	Private coll.
203	unit	1660	96.3075	1.18	Vecchi 2, 12.9.1996, lot 1032
204	unit	1660	96.3076	1.20	Vecchi 2, 12.9.1996, lot 1033
205	unit	1660	96.3077	1.22	Vecchi 2, 12.9.1996, lot 1034
206	unit	1660	96.3078	1.22	Vecchi 2, 12.9.1996, lot 1035
207	unit	1660	97.0876	-	Private coll.
208	unit	1660	97.0877	-	Private coll.
209	unit	1660	01.0528	1.17	Rudd 2001 list 57, no. 64
210	unit	1660	01.1471	1.22	Rudd 2001 list 60, no. 47

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
211	unit	1663/1666	93.0669	1.01	Private coll.
212	unit	1663/1666	94.0483	-	Rudd (not in lists)
213	unit	1663/1666	94.0539	1.18	Rudd 1993 list 9, no. 42
214	unit	1663/1666	94.0542	-	Rudd (not in lists)
215	unit	1663/1666	96.1212	1.27	Private coll.
216	unit	1663/1666	96.1214	1.22	Private coll.
217	unit	1663/1666	96.1216	1.21	Private coll.
218	unit	1663/1666	96.1219	1.26	Private coll.
219	unit	1663/1666	96.1220	1.23	Private coll.
220	unit	1663/1666	96.3072	1.46	Vecchi 2, 12.9.1996, lot 1029
221	unit	1663/1666	96.3079	1.24	Vecchi 2, 12.9.1996, lot 1036
222	unit	1663/1666	96.3080	1.20	Vecchi 2, 12.9.1996, lot 1037
223	unit	1663/1666	96.3081	1.27	Vecchi 2, 12.9.1996, lot 1038
224	unit	1663/1666	96.3082	1.23	Vecchi 2, 12.9.1996, lot 1039
225	unit	1663/1666	96.3083	1.24	Vecchi 2, 12.9.1996, lot 1040
226	unit	1663/1666	97.0878	-	Private coll.
227	unit	1663/1666	97.0879	-	Private coll.
228	unit	1663/1666	97.0880	-	Private coll.
229	unit	1663/1666	97.0881	-	Private coll.
230	unit	1663/1666	03.0173	1.23	Rudd 2003 Liz's list 4, no. 32
231	unit	1663/1666	03.0916	1.26	Rudd 2004 Liz's list 9, no. 34
232	unit	1663/1666	06.0566	1.25	Rudd 2007 list 91, no. 101
233	unit	1669	93.0679	1.19	Private coll.
234	unit	1669	94.0537	1.25	Rudd 1998 list 36, no. 25
235	unit	1669	96.1222	1.24	Private coll.
236	unit	1669	96.1223	1.21	Private coll.
237	unit	1669	96.3084	1.23	Vecchi 2, 12.9.1996, lot 1041

East Anglia, silver units inscribed SAENV

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
238	unit	1699	93.0194	1.24	Cummings Feb. 1993, E32
239	unit	1699	95.1113	1.20	Private coll.
240	unit	1699	96.3085	1.10	Vecchi 2, 12.9.1996, lot 1042
241	unit	1699	97.0882	-	Private coll.
242	unit	1699	01.0268	1.20	Private coll.
243	unit	1699	01.0269	1.20	Private coll.
244	unit	1699	01.0529	1.24	Rudd 2001 list 57, no. 65

East Anglia, silver units inscribed AESV

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
245	unit	1702	93.0193	1.21	Rudd 1993 list 9, no. 45
246	unit	1702	94.0532	-	Rudd (not in lists)
247	unit	1702	95.3363	1.26	Private coll.
248	unit	1702	95.3364	1.19	Private coll.
249	unit	1702	96.3086	1.31	Vecchi 2, 12.9.1996, lot 1043
250	unit	1702	05.0719	1.24	Rudd 2005 Liz's list 20, no. 35

East Anglia, uncertain pattern/horse silver units

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
251	unit		95.1145	1.38	Private coll.
252	unit		97.0883	-	Private coll.

East Anglia, silver half-units inscribed ECEN, ECE *or* ED(N)[18]

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
253	half-unit	1684–1693	93.0398	0.49	Cummings June 1993, H26
254	half-unit	1684–1693	93.0998	0.47	Birmingham 1993 C417, ex Finney
255	half-unit	1684–1693	93.0999	0.57	Birmingham 1993 C418, ex Finney
256	half-unit	1684–1693	94.0156	0.50	Private coll.
257	half-unit	1684–1693	94.0157	0.43	King's Lynn Museum
258	half-unit	1684–1693	94.0535	0.49	Rudd 1994 list 10, no. 25
259	half-unit	1684–1693	94.0536	0.47	Rudd 1998 list 33, no. 19
260	half-unit	1684–1693	95.1115	0.49	Private coll.
261	half-unit	1684–1693	95.1146	0.54	Private coll.
262	half-unit	1684–1693	95.3382	0.46	Private coll.
263	half-unit	1684–1693	97.0868	-	Private coll.
264	half-unit	1684–1693	97.0869	-	Private coll.
265	half-unit	1684–1693	97.0870	-	Private coll.
266	half-unit	1696	93.0996	0.54	Birmingham, ex Finney, ex Dolphin

North-Eastern, uninscribed silver units[19]

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
267	unit	1779 or 1782	95.3355	1.20	Private coll.
268	unit	1779 or 1782	96.1284	0.77	Private coll.
269	unit	1779 or 1782	96.1286	1.04	Private coll.
270	unit	1779 or 1782	96.1287	0.94	Private coll.
271	unit	1779 or 1782	96.1288	1.12	Private coll.
272	unit	1779 or 1782	96.1289	1.31	Private coll.
273	unit	1779 or 1782	96.1291	1.09	Private coll.
274	unit	1779 or 1782	96.3092	1.45	Vecchi 2, 12.9.1996, lot 1050
275	unit	1779 or 1782	96.3093	1.49	Vecchi 2, 12.9.1996, lot 1051
276	unit	1779 or 1782	96.3094	1.05	Vecchi 2, 12.9.1996, lot 1052
277	unit	1779 or 1782	96.3095	0.72	Vecchi 2, 12.9.1996, lot 1053
278	unit	1779 or 1782	96.3096	1.18	Vecchi 2, 12.9.1996, lot 1054
279	unit	1779 or 1782	96.3098	1.31	Vecchi 2, 12.9.1996, lot 1056
280	unit	1779 or 1782	96.3100	0.95	Vecchi 2, 12.9.1996, lot 1058
281	unit	1779 or 1782	96.3101	1.00	Vecchi 2, 12.9.1996, lot 1059
282	unit	1779 or 1782	96.3105	1.26	Vecchi 2, 12.9.1996, lot 1063
283	unit	1785	96.3104	1.01	Vecchi 2, 12.9.1996, lot 1062
284	unit	1788	96.3102	1.44	Vecchi 2, 12.9.1996, lot 1060
285	unit	1791	96.3103	1.46	Vecchi 2, 12.9.1996, lot 1061
286	unit	1797	96.1285	1.60	Private coll.
287	unit	1797	96.1290	1.32	Private coll.
288	unit	1797	96.1292	1.40	Private coll.
289	unit	1797	96.1293	1.46	Private coll.
290	unit	1797	96.3097	0.95	Vecchi 2, 12.9.1996, lot 1055
291	unit	1797	96.3099	1.25	Vecchi 2, 12.9.1996, lot 1057
292	unit	1806	00.0195	1.08	Private coll.

North-Eastern, uninscribed silver half-units

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
293	half-unit	1833	00.0159	0.39	Private coll.
294	half-unit	1833	07.0355	0.54	Private coll.

North-Eastern, silver units inscribed VEP, VEP CORF *or similar*

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
295	unit	1866–1884	95.1116	1.01	Private coll.
296	unit	1866–1884	96.3111	1.25	Vecchi 2, 12.9.1996, lot 1070
297	unit	1866–1884	96.3112	1.27	Vecchi 2, 12.9.1996, lot 1071
298	unit	1866–1884	07.0254	1.36	Private coll.
299	unit	1866–1884	07.0255	0.87	Private coll.
300	unit	1866–1884	07.0260	1.02	Private coll.
301	unit	1866–1884	07.0261	0.96	Private coll.
302	unit	1866–1884	07.0262	1.00	Private coll.
303	unit	1866–1884	07.0266	1.24	Private coll.
304	unit	1866–1884	07.0270	1.16	Private coll.
305	unit	1866–1884	07.0295	1.29	Private coll.

North-Eastern, silver half-units inscribed VEP, VEP CORF *or similar*

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
306	half-unit	1887–1908	95.1117	0.54	Private coll.
307	half-unit	1887–1908	96.3113	0.53	Vecchi 2, 12.9.1996, lot 1072
308	half-unit	1887–1908	96.3115	0.52	Vecchi 2, 12.9.1996, lot 1074
309	half-unit	1887–1908	00.0125	0.54	Private coll.
310	half-unit	1887–1908	07.0252	0.44	Private coll.
311	half-unit	1887–1908	07.0253	0.50	Private coll.
312	half-unit	1887–1908	07.0256	0.56	Private coll.
313	half-unit	1887–1908	07.0257	0.56	Private coll.
314	half-unit	1887–1908	07.0258	0.48	Private coll.
315	half-unit	1887–1908	07.0259	0.56	Private coll.
316	half-unit	1887–1908	07.0263	0.53	Private coll.
317	half-unit	1887–1908	07.0264	0.52	Private coll.
318	half-unit	1887–1908	07.0265	0.53	Private coll.
319	half-unit	1887–1908	07.0267	0.54	Private coll.
320	half-unit	1887–1908	07.0268	0.43	Private coll.
321	half-unit	1887–1908	07.0269	0.53	Private coll.
322	half-unit	1887–1908	07.0271	0.50	Private coll.
323	half-unit	1887–1908	07.0272	0.49	Private coll.
324	half-unit	1887–1908	07.0273	0.43	Private coll.
325	half-unit	1887–1908	07.0274	0.55	Private coll.
326	half-unit	1887–1908	07.0275	0.52	Private coll.
327	half-unit	1887–1908	07.0276	0.47	Private coll.
328	half-unit	1887–1908	07.0277	0.44	Private coll.
329	half-unit	1887–1908	07.0278	0.43	Private coll.
330	half-unit	1887–1908	07.0279	0.51	Private coll.
331	half-unit	1887–1908	07.0280	0.53	Private coll.
332	half-unit	1887–1908	07.0281	0.38	Private coll.
333	half-unit	1887–1908	07.0282	0.52	Private coll.
334	half-unit	1887–1908	07.0283	0.51	Private coll.
335	half-unit	1887–1908	07.0284	0.51	Private coll.
336	half-unit	1887–1908	07.0285	0.53	Private coll.
337	half-unit	1887–1908	07.0286	0.54	Private coll.
338	half-unit	1887–1908	07.0287	0.47	Private coll.
339	half-unit	1887–1908	07.0288	0.49	Private coll.
340	half-unit	1887–1908	07.0289	0.54	Private coll.
341	half-unit	1887–1908	07.0290	0.55	Private coll.

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
342	half-unit	1887–1908	07.0291	0.50	Private coll.
343	half-unit	1887–1908	07.0292	0.42	Private coll.
344	half-unit	1887–1908	07.0293	0.54	Private coll.
345	half-unit	1887–1908	07.0294	0.37	Private coll.
346	half-unit	1887–1908	07.0296	0.47	Private coll.
347	half-unit	1887–1908	07.0297	0.48	Private coll.
348	half-unit	1887–1908	07.0298	0.43	Private coll.
349	half-unit	1887–1908	07.0299	0.50	Private coll.
350	half-unit	1887–1908	07.0300	0.59	Private coll.
351	half-unit	1887–1908	07.0301	0.38	Private coll.
352	half-unit	1887–1908	07.0302	0.52	Private coll.
353	half-unit	1887–1908	07.0303	0.45	Private coll.
354	half-unit	1887–1908	07.0304	0.51	Private coll.
355	half-unit	1887–1908	07.0305	0.53	Private coll.
356	half-unit	1887–1908	07.0306	0.48	Private coll.
357	half-unit	1887–1908	07.0307	0.49	Private coll.
358	half-unit	1887–1908	07.0308	0.50	Private coll.
359	half-unit	1887–1908	07.0309	0.39	Private coll.
360	half-unit	1887–1908	07.0310	0.55	Private coll.
361	half-unit	1887–1908	07.0311	0.57	Private coll.
362	half-unit	1887–1908	07.0312	0.53	Private coll.
363	half-unit	1887–1908	07.0313	0.52	Private coll.
364	half-unit	1887–1908	07.0314	0.50	Private coll.
365	half-unit	1887–1908	07.0315	0.42	Private coll.
366	half-unit	1887–1908	07.0316	0.57	Private coll.
367	half-unit	1887–1908	07.0317	0.53	Private coll.
368	half-unit	1887–1908	07.0318	0.50	Private coll.
369	half-unit	1887–1908	07.0319	0.58	Private coll.
370	half-unit	1887–1908	07.0320	0.51	Private coll.
371	half-unit	1887–1908	07.0321	0.60	Private coll.
372	half-unit	1887–1908	07.0322	0.58	Private coll.
373	half-unit	1887–1908	07.0323	0.54	Private coll.
374	half-unit	1887–1908	07.0324	0.46	Private coll.
375	half-unit	1887–1908	07.0325	0.55	Private coll.
376	half-unit	1887–1908	07.0326	0.52	Private coll.
377	half-unit	1887–1908	07.0327	0.52	Private coll.
378	half-unit	1887–1908	07.2302	-	Cummings summer 1992, E25
379	half-unit	1887–1908	07.2305	0.43	In trade (Gillis)
380	half-unit	1887–1908	07.2308	-	Trennery Xmas 1991, no. 105

North-Eastern, silver minims inscribed VEP CO

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
381	minim	1914	93.0097	0.35	Private collection
382	minim	1914	93.0098	0.30	Private collection
383	minim	1914	93.0099	0.26	Private collection
384	minim	1914	94.0223	0.28	Private collection
385	minim	1914	96.3114	0.26	Vecchi 2, 12.9.1996, lot 1073

North-Eastern, silver units inscribed IISVP RASV

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
386	unit	1920	96.3110	1.32	Vecchi 2, 12.9.1996, lot 1069
387	unit	1920	02.1177	1.32	BMC 3273
388	unit	1920	07.0245	1.07	Private coll.
389	unit	1920	07.0246	1.17	Private coll.
390	unit	1920	07.0247	1.35	Private coll.
391	unit	1920	07.0248	1.32	Private coll.
392	unit	1920	07.0249	1.29	Private coll.

North-Eastern, silver units inscribed AVN COST

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
393	unit	1935–1941	93.0977	1.22	Cummings Xmas 1993, H48
394	unit	1935–1941	95.3354	1.15	Private coll.
395	unit	1935–1941	95.3356	1.30	Private coll.
396	unit	1935–1941	95.3357	1.04	Private coll.
397	unit	1935–1941	96.3108	1.16	Vecchi 2, 12.9.1996, lot 1066
398	unit	1935–1941	99.0874	1.12	Rudd 1999 list 46, no. 34
399	unit	1935–1941	99.1257	1.24	Rudd 1999 list 47, no. 46
400	unit	1935–1941	07.0214	1.08	Private coll.
401	unit	1935–1941	07.0215	0.98	Private coll.
402	unit	1935–1941	07.0216	0.93	Private coll.
403	unit	1935–1941	07.0217	1.28	Private coll.
404	unit	1935–1941	07.0218	1.31	Private coll.
405	unit	1935–1941	07.0219	1.28	Private coll.
406	unit	1935–1941	07.0220	-	Private coll.
407	unit	1935–1941	07.0221	0.87	Private coll.
408	unit	1935–1941	07.0222	1.00	Private coll.
409	unit	1935–1941	07.0223	1.20	Private coll.
410	unit	1950	92.0612	1.28	Private coll.

North-Eastern, silver half-units inscribed AVN COST

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
411	half-unit	1953	96.3109	0.46	Vecchi 2, 12.9.1996, lot 1067
412	half-unit	1953	07.0235	0.52	Private coll.
413	half-unit	1953	07.0236	0.57	Private coll.
414	half-unit	1953	07.0237	0.49	Private coll.
415	half-unit	1953	07.0238	0.48	Private coll.
416	half-unit	1953	07.0239	0.58	Private coll.
417	half-unit	1953	07.0240	0.53	Private coll.
418	half-unit	1953	07.0241	0.53	Private coll.
419	half-unit	1953	07.0242	0.58	Private coll.
420	half-unit	1953	07.0243	0.54	Private coll.
421	half-unit	1953	07.0244	0.22	Private coll.

North-Eastern, silver unit inscribed LAT ISON

de Jersey no.	Denom.	ABC	CCI number	Wt (g)	Information source
422	unit	1959	07.0250	1.26	Private coll.

North-Eastern, silver half-unit inscribed LAT ISON

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
423	half-unit	1968	07.0251	0.52	Private coll.

North Thames, uninscribed silver unit

de Jersey no.	Denom.	*ABC*	CCI number	Wt (g)	Information source
424	unit	2481	95.1148	1.36	Private coll.

Uncertain Iron Age silver fraction

de Jersey no.	Denom.	ABC	CCI number	Wt (g)	Information source
425	fraction		95.1147	0.07	Private coll.

Total: 425 +

Part 2 OTHER IRON AGE COINS FROM THE SITE (all unstratified topsoil/subsoil contexts unless stated): *Catalogue by Eleanor Ghey (NB catalogue numbering resumes from here)*

Greek coins: Cat. nos 188–95

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom. / Mint	*ABC*	Other refs	Wt (g)	Date
188.	NCM	2005.1	Female head, left	Horse right, palm behind; before, three pellets above and one below	MD 2003–9	Woodland	N/A	Bronze / Carthage	N/A	*SNG* Copenhagen 118; Alexandropoulos 2007, 367, no. 18m	2.26	*c.* 400–350 BC
189.	NCM	2007.1	Female head, left	Horse right, palm behind	MD 2003–9	Woodland	N/A	Bronze / Carthage	N/A	Cf. Alexandropoulos 2007, 366, no. 18	2.32	*c.* 400–350 BC
190.	NCM	2005.2	Head of Apollo, laureate, left	[…] (in ex.) Bull, butting, right	MD 2003–9	Woodland	N/A	Bronze / Massalia	N/A	Cf. Feugère and Py 2011, 110ff, series MBM-28 or 33	5.43 (18mm diam.)	*c.* late 3rd to early 2nd century BC
191.	NCM	2007.3	Head, left	Bull, butting right?	MD 2003–9	Woodland	N/A	Bronze / probably Massalia or imitation	N/A	As above	4.82 (14mm diam.)	*c.* late 3rd to early 2nd century BC
192.	NCM	2003.5	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	Bronze / probably Massalia or imitation[20]	N/A	As above	5.48	*c.* late 3rd to early 2nd century BC
193.	NCM	2003.6	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	Bronze / probably Massalia or imitation	N/A	As above	5.67	*c.* late 3rd to early 2nd century BC
194.	NCM	2003.7	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	Bronze / probably Massalia or imitation	N/A	As above	6.17	*c.* late 3rd to early 2nd century BC
195.	NCM	2007.2	Head of Apollo, right	Lion, right, looking back. Star above. ΚΛΕΙΣΙΠΠ in exergue. Monogram / N in right field	MD 2003–9	Woodland	N/A	Hemiobol / Miletos, magistrate 'Kleisipp[…]' [21]	N/A	Cf. Marcellesi 2004 9, p.173 or 35, p.179 for type	4.61	*c.* late 3rd to 2nd century BC

Imported continental Iron Age coinage

Gaul (Normandy) (Cat. nos 196–7)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
196.	NCM	2007.4	Head, right, scroll below neck	Horse (and rider?), left	MD 2003–9	Woodland	N/A	stater (plated)	N/A	Uncertain, probably Normandy, cf. DT II series 242	5.09	1–2
197.	BM	1991,0904.13	Stylised head, right	Horse and charioteer, right; wheel below	MD 1990	Area 10	N/A (Jackson no. 523)	half stater (plated)	N/A	Sills 2003, 377; BN 10198 type; cf. DT I 101 type	2.44	1–2

Gallo-Belgic (Cat. nos 198–212)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	ABC	Other refs	Wt (g)	Period
198.	BM	1992,0803.1	Laureate head of Apollo, left	Horse, left	MD 1990–1	Area 27	N/A	stater	4	Sills 2003 Gallo-Belgic Ab Class 7[22]	6.86	1–2
199.	BM	1992,0803.2	Laureate head of Apollo, right	Horse, right	MD 1990–1	Area 26	N/A	quarter stater	28	Sills 2003 Gallo-Belgic Aa Class 4	1.73	1–2
200.	BM	1991,1017.3	Stylised head of Apollo, right	Stylised horse, right	MD 1990	Area 13	SN/RA	stater	13	Sills 2003 Gallo-Belgic Ca1 Class 3; CCI 99.1997	6.59	4
201.	BM	2009,4213.19	Stylised head of Apollo, right	Stylised horse, right	MD 1990–1	Area 9	N/A	stater (plated – core only)	Cf 13	Gallo-Belgic C	2.03	4
202.	BM	2009,4213.24	Illegible	Stylised horse, right	MD 1990–1	Area 23	N/A	stater (plated – core only)	Cf 16	Gallo-Belgic E	2.22	5
203.	BM	2009,4213.27	Die obliterated	Stylised horse, right	MD 1990–1	Area 14	N/A	stater (plated)	16	Gallo-Belgic E, Scheers Class II	4.07	5
204.	NCM	2007.5	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater (plated?)	40	Gallo-Belgic D	0.88[23]	4–5
205.	NCM	2007.6	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater (plated?)	40	Gallo-Belgic D	1.21	4–5
206.	NCM	2007.7	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater (plated?)	40	Gallo-Belgic D	1.10	4–5
207.	NCM	2007.8	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater (plated?)	40	Gallo-Belgic D	0.99	4–5
208.	NCM	2007.9	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater (plated?)	40	Gallo-Belgic D	0.94	4–5
209.	NCM	2007.10	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater	40	Gallo-Belgic D, Scheers Class III	1.46	4–5
210.	NCM	2007.11	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater (plated)	40	Gallo-Belgic D	0.81	4–5
211.	NCM	2005.19	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater	40	Gallo-Belgic D	1.44	4–5
212.	NCM	2005.20	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater (plated – core only)	40	Gallo-Belgic D	0.85g	4–5

British Iron Age Coinage

Southern British Iron Age (Cat. nos 213–16)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
213.	BM	1991,1017.2	Stylised head of Apollo, right	Stylised horse, right	MD 1990	Area 5	SN/KQ	stater (plated)	515	Sills 2017, 153, Insular Cf1 Class 1; CCI 99.1996	6.29	4
214.	BM	1991,1017.6	Stylised head of Apollo, right	Stylised horse, left	MD 1990	Area 9	SN/MW	stater	482	Sills 2017, 102, British Ad1 Class 3; BMC 24 type; CCI 99.1993	6.44	4
215.	BM	1991,1017.4	Uncertain animal	Abstract design	MD 1990	Area 4	SN/KL	quarter stater	N/A	Sills 2017, 107, British Aa2 Class 1; CCI 95.3817	1.48	4
216.	NCM	2009.8	Uncertain animal	Abstract design	MD 2003–9	Woodland	N/A	quarter stater	N/A	Sills 2017, British Aa2 Class 2	1.51	4

Eastern British Iron Age / North Thames (Cat. nos 217–31)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
217.	BM	1991,1017.5	Stylised head of Apollo, right	Stylised horse, left	MD 1990	Area 1	SN/HQ	stater	2430	Sills 2017, 416, British Ab1 Class 3; CCI 99.1994	6.36	4
218.	BM	2009,4213.9	Stylised head of Apollo, right	Stylised horse, left	MD 1991	Area 16	ST/AD	stater	2430	Sills 2017, 416, British Ab1 Class 3	6.43	4
219.	NCM	1990.204.2	Stylised head of Apollo, right	Stylised horse, left	MD 1989[24]	Area 9	N/A	stater	2430	Sills 2017, 416, British Ab1 Class 3; CCI 90.0005	6.35	4
220.	BM	1991,0904.12	Uncertain animal	Abstract design	MD 1990	Area 4	N/A (Jackson no. 524)	quarter stater	2448	Sills 2017, 418, British Ac2[25] Class 2; CCI 95.3818	1.21	4
221.	NCM	1949.76.13	Uncertain animal	Abstract design	Exc. 1948	Clarke's 'Site 33'; Area 9	N/A	quarter stater	2448	Sills 2017, 418, British Ac2[26] Class 2; CCI 61.0326; Clarke no. 13	1.26	4
222.	BM	1992,0803.3	Uncertain animal	Abstract design	MD Dec. 1990–1	Area 19	N/A	quarter stater	2448 var.	Sills 2017, 418, British Ab2 Class 3; CCI 15.0326	1.39	4–5
223.	BM	1991,1017.7	Stylised head of Apollo, right	Stylised horse, right	MD 1990	Area 12	SN/QG	stater	2329	Sills 2017, 426, British G1 Class 2a; CCI 99.1992	6.13	4–5
224.	BM	1992,0803.4	Stylised head of Apollo, right	Stylised horse, right	MD 1990–1	Just to the east of Area 19	N/A	stater	2329	Sills 2017, 426, British G1 Class 2a; CCI 15.0598	5.88	4–5
225.	NCM	2007.12	Uncertain animal	Horse, right	MD 2003–9	Woodland	N/A	quarter stater	2350	CCI 17.0279 Sills 2017, 428, British G2 Class 2a[27]	1.31	4–5
226.	NCM	2007.13	Uncertain animal	Horse, right	MD 2003–9	Woodland	N/A	quarter stater	2350	CCI 17.0284 Sills 2017, 428, British G2 Class 2a	0.96	4–5
227.	NCM	2007.14	Uncertain animal	Horse, right	MD 2003–9	Woodland	N/A	quarter stater	2350	CCI 17.0282 Sills 2017, 428, British G2 Class 2a	1.10	4–5
228.	NCM	2007.15	Uncertain animal	Horse, right	MD 2003–9	Woodland	N/A	quarter stater	2350	CCI 17.0281 Sills 2017, 428, British G2 Class 2a	0.76 (incomplete)	4–5
229.	NCM	2007.16	Uncertain animal	Horse, right	MD 2003–9	Woodland	N/A	quarter stater	2350	CCI 17.0280 Sills 2017, 428, British G2 Class 2a	1.05	4–5

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
230.	NCM	2007.37	Uncertain animal	Horse, right.	MD 2003–9	Woodland	N/A	quarter stater	2350	CCI 17.0283 Sills 2017, 428, British G2 Class 2a	0.64 (incomplete)	4–5
231.	NCM	2007.57	Crescents in wreath	[…] Horse, left, branch below	MD 2003–9	Woodland	N/A	stater (plated)	cf. 2392	Plated core of stater of Dubnovellaunos, BMC 2441	3.11	7

East Anglian British Iron Age (Norfolk and neighbouring counties)
Gold (Cat. nos 232–63)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
232.	NCM	2005.21	Head, right	Wolf, left	MD 2003–9	Woodland	N/A	stater	1399		5.50	6
233.	NCM	2005.22	Head, right	Wolf, left	MD 2003–9	Woodland	N/A	stater	1399		5.49	6
234.	NCM	1990.203.1	Head, right	Wolf, left	MD 1989	Area 15	N/A	stater[28]	1399	CCI 90.0008	5.85	6
235.	BM	1991,1017.10	Head, right	Wolf, left	MD 1990	Area 2	SN/EQ	stater[29]	1399	BMC 218; CCI 97.0072	5.60	6
236.	BM	1991,1017.12	Head, right	Wolf, left	MD 1990	Area 9	SN/JH	stater	1399	BMC 219; CCI 97.0073	5.54	6
237.	BM	1991,1017.9	Head, right.	Wolf, left	MD 1990	Area 2	SN/ER	stater	1399	BMC 249; CCI 97.0102	5.72	6
238.	BM	1991,0904.15	Head, right	Wolf, left	MD 1990[30]	Area 12	SN/NH	stater	1399	BMC 251; CCI 97.0104	5.02	6
239.	BM	1991,1018.1	Head, right	Wolf, left	MD 1990	Area 1	SN/NG	stater[31]	1399	BMC 252; CCI 97.0105	5.05	6
240.	BM	1991,0904.14	Head, right	Wolf, left	MD 1990	Area 4	N/A (Jackson no. 522)	stater	1399	BMC 274; CCI 97.0127	4.91	6
241.	BM	1991,1017.8	Head, right	Wolf, left	MD 1990	Area 4	SN/KG	stater	1399	BMC 276; CCI 97.0129	5.47	6
242.	BM	1991,1017.11	Head, right	Wolf, left	MD 1990	Area 2	SN/EH	stater	1399	BMC 275; CCI 97.0128	5.19	6
243.	BM	2009,4213.11	Head, right	Wolf, left	MD 1991	Area 27	ST/GL	stater	1399	BMC 218 type	5.30	6
244.	BM	2009,4213.10	Head, right	Wolf, left	Exc. 1991, enclosure ditch, ST45	Area 20	ST/CQ	stater	1399	BMC 227 type	5.18	6
245.	BM	2009,4213.12	Head, right	Wolf, left	MD 1991	Area 21	ST/HA	stater	1399	BMC 227 type	4.95	6
246.	BM	1991,1018.2	Head, right	Wolf, left	MD 1990	Area 12	SN/QF	stater (plated)	1399	BMC 250; CCI 97.0103	3.72	6
247.	BM	1991,1018.5	Head, right	Wolf, left	MD 1990	Area 11	SN/QD	stater[32]	1399	BMC 265; CCI 97.0118	4.62	6
248.	BM	1991,1018.4	Head, right	Wolf, left	MD 1990	Area 12	SN/QV	stater	1399	BMC 266; CCI 97.0119	3.61	6
249.	BM	1991,1018.6	Head, right	Wolf, left	MD 1990	Area 12	SN/QX	stater	1399	BMC 267; CCI 97.0120	4.20	6
250.	BM	1991,1018.3	Head, right	Wolf, left	MD 1990	Area 11	SN/QE	stater[33]	1399	BMC 272; CCI 97.0125	4.63	6
251.	BM	1991,1018.8	Head, right	Wolf, left	MD 1990	Area 9	SN/NE	stater	1399	BMC 273; CCI 97.0126	4.23	6
252.	BM	1991,1018.7	Head, right	Wolf, left	MD 1990	Area 12	SN/QU	stater	1399	BMC 277; CCI 97.0130	4.09	6
253.	BM	1991,1018.9	Head, right	Wolf, left	MD 1990	Area 12	SN/QT	stater	1399	BMC 278; CCI 97.0131	4.25	6
254.	BM	2009,4213.14	Head, right	Wolf, left	MD 1991	Area 24	ST/EH	stater (plated)	1399	BMC 227 type	4.29	6
255.	BM	2009,4213.15	Head, right	Wolf, left	MD 1991	Area 12	ST/FA	stater (plated)	1399	BMC 227 type	3.97	6
256.	NCM	2007.18	Head, right	Wolf, left	MD 2003–9	Woodland	N/A	stater (base)	cf 1399	BMC 253 type	3.33	6
257.	NCM	2007.19	Head, right	Wolf, left	MD 2003–9	Woodland	N/A	stater (base)	cf 1399	BMC 253 type	3.40	6

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
258.	NCM	2007.20	Head, right	Wolf, left	MD 2003–9	Woodland	N/A	stater (base)	cf 1399	BMC 253 type	3.17	6
259.	NCM	1990.204.3	Head, right	Wolf, left	MD 1989[34]	Area 13	N/A	stater (plated copper alloy core)	cf 1399	CCI 90.0028	1.76	6
260.	NCM	2005.23	Lattice design	Horse, right; below, pellet in circle	MD 2003–9	Woodland	N/A	quarter stater	1480	Irstead type	1.02	7
261.	NCM	2005.24	Lattice design	Horse, right	MD 2003–9	Woodland	N/A	quarter stater? (plated copper alloy core)	Cf 1477 / 1480	Possible Irstead / Boar Horse C type	0.54	7
262.	NCM	2007.22	Wreath	Horse, right	MD 2003–9	Woodland	N/A	quarter stater	1462	Snettisham type	0.95	6–7
263.	NCM	2007.23	Wreath	Horse, right	MD 2003–9	Woodland	N/A	quarter stater	1462	Snettisham type	0.97	6–7

Silver (Cat. nos 264–361)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
264.	NCM	2007.24	Head, left	Horse, left	MD 2003–9	Woodland	N/A	unit	1495	Bury A	1.20	6–7
265.	NCM	2007.25	Head, left	Horse, left	MD 2003–9	Woodland	N/A	unit	1495	Bury A	1.21	6–7
266.	NCM	2007.26	Head, left	Horse, left	MD 2003–9	Woodland	N/A	unit	1495	Bury A	1.18	6–7
267.	NCM	2007.27	Head, left	Horse, left	MD 2003–9	Woodland	N/A	unit	1495	Bury A	0.88	6–7
268.	NCM	2005.31	Head, left	Horse, left	MD 2003–9	Woodland	N/A	unit	1495	Bury A	0.84	6–7
269.	NCM	2007.28	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1501	Bury B	1.23	6–7
270.	NCM	2007.29	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1501	Bury B	1.17	6–7
271.	NCM	2007.30	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1501	Bury B	1.00	6–7
272.	NCM	2009.13	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1501	Bury B	1.36	6–7
273.	BM	1991,1017.13	Head, left	Horse, right	MD 1990	Area 12	SN/QW	unit	1519	Bury E	0.83 (incomplete)	6–7
274.	NCM	2005.32	Head, right?	Horse, left	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain Bury type [35]	0.49 (incomplete)	6–7
275.	N/A	Retained by finder	Head, left	Stylised horse, right, star above tail	MD 1991	Woodland	ST/KA	unit	1522	Large Flan A	not recorded	6–7
276.	NCM	2007.31	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1525	Large Flan C	1.28	6–7
277.	NCM	2007.32	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1525	Large Flan C	0.60	6–7
278.	NCM	2003.37	Head, bearded, right	Horse, right	MD 2003–9	Woodland	N/A	unit (plated)	1525	Large Flan C[36]	0.99	6–7
279.	NCM	2005.35	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1525	Large Flan C	0.92g	6–7
280.	NCM	2005.36	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit (plated)	1525	Large Flan C	0.81g	6–7
281.	NCM	2005.37	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1525	Large Flan C	1.24g	6–7
282.	NCM	2003.31	Head, right	Illegible (folded inwards)	MD 2003–9	Woodland	N/A	unit	Cf 1510 / 1525	Large Flan B or C	1.27	6–7
283.	BM	1991,1017.14	Head, right	Horse, right	MD 1990	Area 12	SN/QS	unit	1531	BMC 3545; Snettisham unit	0.95 (incomplete)	7

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
284.	NCM	2009.11	Head, right (unclear)	Horse, right	MD 2003–9	Woodland	N/A	unit	1531	Snettisham unit	0.66 (bent / folded flan)	7
285.	NCM	2003.29	Illegible	Horse, right	MD 2003–9	Woodland	N/A	unit	1537	Irstead A	1.06	7
286.	NCM	2005.33	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1537 var.[37]	Plouviez unit; BMC 3546 type	1.16	7
287.	NCM	2003.33	Illegible	Horse, right	MD 2003–9	Woodland	N/A	unit	1537 var.[38]	Plouviez unit; BMC 3546 type	1.07	7
288.	NCM	2003.22	Head right	Horse, left	MD 2003–9	Woodland	N/A	unit	Cf 1549/ 1558	Saham Toney unit	0.75	7
289.	NCM	2007.33	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1561	Saham Toney unit[39]	0.69	7
290.	NCM	2007.34	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1561	Saham Toney unit	0.70	7
291.	NCM	2007.35	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1567	Late Face Horse	0.96	8
292.	NCM	2007.36	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1567	Late Face Horse	0.92	8
293.	NCM	2005.38	Head right	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1567	Late Face Horse type (folded)	1.24	8
294.	NCM	2005.39	Head right	Horse, right	MD 2003–9	Woodland	N/A	unit	1567	Late Face Horse	1.07	8
295.	NCM	2005.40	Head right	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1567	Late Face Horse	0.82 (incomplete)	8
296.	NCM	2007. 38	Head, right	Horse, right	MD 2003–9	Woodland	N/A	unit (plated)	1564 / 7	Late Face Horse	0.65	8
297.	NCM	2005.34	Head, right?	Horse, right?	MD 2003–9	Woodland	N/A	unit	uncertain	Possibly Late Face Horse	0.67	8?
298.	NCM	2005.26	Boar, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1570	Early Boar Horse	1.51	7
299.	NCM	2005.25	Boar, right	Horse, right; above, wheel	MD 2003–9	Woodland	N/A	unit	1573	Early Boar Horse	1.20	7
300.	NCM	2005.28	Boar, right	Horse, right; pellets in exergue	MD 2003–9	Woodland	N/A	unit	1576	Boar Horse B (A) type	1.15	7–8
301.	BM	1991,1017.15	Boar, right	Not visible	MD 1990	Area 14	SN/RE	fused lump of silver coins, including one unit	1576	One identifiable Boar Horse B (A) type	7.76 (total). In two fragments	7
302.	NCM	2005.29	Boar, right	Horse, right; below, star	MD 2003–9	Woodland	N/A	unit	1579	Boar Horse B type	1.18	7–8
303.	NCM	2003.36	Boar, right	Horse, right; below, star	MD 2003–9	Woodland	N/A	unit	1579	Boar Horse B type	1.12	7–8
304.	NCM	2003.23	Boar, right	Horse, right; below, cross	MD 2003–9	Woodland	N/A	unit (plated)	1579 var.	Boar Horse B[40]	1.27	7–8
305.	NCM	2003.15	Boar, right	Horse, right; below, star	MD 2003–9	Woodland	N/A	unit	1579	Boar Horse B	1.18	7–8
306.	NCM	2003.20	Boar, right	Horse, right; below, star	MD 2003–9	Woodland	N/A	unit	1579	Boar Horse B	1.34	7–8
307.	NCM	2007.39	Boar, right	Horse, right; below, star	MD 2003–9	Woodland	N/A	unit	1579	Boar Horse B	1.01	7–8

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
308.	NCM	2007.40	Boar, right	Horse, right; below, star	MD 2003–9	Woodland	N/A	unit	1579	Boar Horse B	0.98	7–8
309.	NCM	2009.12	Boar, right	Horse, right; below, star	MD 2003–9	Woodland	N/A	unit	1579	Boar Horse B	1.06	7–8
310.	NCM	2005.30	Boar, right?	Horse, right; star below	MD 2003–9	Woodland	N/A	unit	Cf 1579	Boar Horse B	0.65g (incomplete)	7–8
311.	NCM	2009.2	Boar, right	Horse, right	MD 2003–9	Woodland	N/A	unit	1582	Boar Horse C	0.58 (incomplete)	7–8
312.	NCM	2005.41	Crescents on crossed wreaths	Horse, right	MD 2003–9	Woodland	N/A	unit	1588	Early Pattern Horse A	1.16g	8
313.	NCM	2005.53	Four petals	Horse, left	MD 2003–9	Woodland	N/A	half unit	1606	Early Pattern Horse B	0.56g	7–8
314.	NCM	2003.14	Triangle with central pellet	Horse, right, wheel above	MD 2003–9	Woodland	N/A	half unit (plated)	1618	Snettisham and Plouviez type[41]	0.44	7
315.	NCM	2007.41	Boar, right	Horse, right	MD 2003–9	Woodland	N/A	half unit	1621?	Boar Horse B	0.28 (frag.)	7–8
316.	NCM	2007.42	Boar, right	Horse, right	MD 2003–9	Woodland	N/A	half unit	1621	Boar Horse B	0.50	7–8
317.	NCM	2009.10	Boar, right	Horse, right	MD 2003–9	Woodland	N/A	half unit (plated)	1621	Boar Horse B	0.38	7–8
318.	NCM	2003.24	Crescents on wreath	Horse, right. ANT[ED]	MD 2003–9	Woodland	N/A	unit	1642/5	Anted; BMC 3856 type	1.08	8
319.	NCM	2007.44	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1642/5	Anted	0.87	8
320.	NCM	2005.45	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	cf 1642/5	Anted	0.78	8
321.	NCM	2005.46	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	cf 1642/5	Anted	1.06	8
322.	NCM	2005.47	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	cf 1642/5	Anted	1.09	8
323.	NCM	2003.32	Crescents on wreath	Horse, right. [ANTE]D	MD 2003–9	Woodland	N/A	unit	1645	Anted; Cf. BMC 3856	0.54	8
324.	NCM	2005.42	Crescents on wreath	Horse, right. ANTED	MD 2003–9	Woodland	N/A	unit	1645	Anted; BMC 3800 type	1.12	8
325.	NCM	2005.43	Crescents on wreath	Horse, right. [AN]TED	MD 2003–9	Woodland	N/A	unit	1645	Anted; BMC 3800 type	0.86	8
326.	NCM	2005.44	Crescents on wreath	Horse, right. [AN]TED	MD 2003–9	Woodland	N/A	unit	1645	Anted; BMC 3856 type	1.23	8
327.	NCM	2009.4	Crescents on wreath	Horse, right. [ANTE]D	MD 2003–9	Woodland	N/A	unit	1645	Anted	1.12	8
328.	NCM	2005.52	Crescents in lozenge	Horse, right. [A]NT[E]D	MD 2003–9	Woodland	N/A	half unit	1648	Anted	0.37	8
329.	NCM	2005.49	Crescents on wreath	Horse, right. [E]CE[N]	MD 2003–9	Woodland	N/A	unit	1657	Ecen	1.13	8
330.	NCM	2005.50	Crescents on wreath	Horse, right. [E]CEN	MD 2003–9	Woodland	N/A	unit	1657	Ecen	1.11	8
331.	NCM	2003.18	Crescents on wreath	Horse, right. [E] CEN	MD 2003–9	Woodland	N/A	unit	1657	Ecen	0.79	8
332.	NCM	2003.21	Crescents on wreath	Horse, right. ECEN	MD 2003–9D	Woodland	N/A	unit	1657	Ecen	1.12	8
333.	NCM	2005.48	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen	1.08	8

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
334.	NCM	2003.16	Crescents on wreath	Horse, right.	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen	1.25	8
335.	NCM	2003.19	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen	0.80	8
336.	NCM	2003.25	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen	1.24	8
337.	NCM	2003.26	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen	0.99	8
338.	NCM	2003.27	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen	0.77	8
339.	NCM	2003.34	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen	0.77	8
340.	NCM	2007.45	Crescents on wreath	Horse, right. [E]CEN	MD 2003–9	Woodland	N/A	unit	1657	Ecen	1.13	8
341.	NCM	2009.3	Crescents on wreath	Horse, right. ECE[N]	MD 2003–9	Woodland	N/A	unit	1657	Ecen	0.99	8
342.	NCM	2009.5	Crescents on wreath	Horse, right. [ECE]N	MD 2003–9	Woodland	N/A	unit	1657	Ecen	1.14	8
343.	NCM	2007.46	Crescents on wreath	Horse, right. ECEN	MD 2003–9	Woodland	N/A	unit (plated?)	1657	Ecen	0.77	8
344.	NCM	2007.47	Crescents on wreath	Horse, right. ECE	MD 2003–9	Woodland	N/A	unit	1663	Ece B; BMC 4445 type	0.82	8
345.	NCM	2007.48	Crescents on wreath	Horse, right. ECE	MD 2003–9	Woodland	N/A	unit	1663 /6	Ece B; BMC 4431 / 4445 type	1.02	8
346.	NCM	2003.28	Crescents on wreath	Horse, right. ED[N]	MD 2003–9	Woodland	N/A	unit	1672	Ecen; BMC 4223ff	1.10	8
347.	NCM	2007.51	Crescents on wreath	Horse, right. (ECE[N]?)	MD 2003–9	Woodland	N/A	unit	Cf 1657ff	Ecen?	0.84	8
348.	NCM	2007.43	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	0.61	8
349.	NCM	2007.49	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	1.11	8
350.	NCM	2007.50	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	0.65	8
351.	NCM	2007.52	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	0.90	8
352.	NCM	2007.53	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	1.13	8
353.	NCM	2007.54	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	0.82	8
354.	NCM	2007.55	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	0.94	8
355.	NCM	2007.56	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit (plated)	uncertain	Uncertain inscribed	0.60 (incomplete)	8
356.	NCM	2003.30	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	0.77	8
357.	NCM	2003.17	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	1.08	8
358.	NCM	2003.35	Crescents on wreath	Horse, right	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain inscribed	0.53	8
359.	NCM	2003.13	Illegible	Horse, right?	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain	0.39 (incomplete)	?
360.	NCM	2005. 51	Illegible	Illegible	MD 2003–9	Woodland	N/A	unit	uncertain	Uncertain	1.12	?
361.	NCM	2005.27	Illegible	Horse, right	MD 2003–9	Woodland	N/A	unit or fraction	uncertain	Possibly Late Face Horse?	0.45	?

North-Eastern British Iron Age (Lincolnshire and neighbouring counties) (Cat. nos 362–7)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
362.	BM	1991,0904.10	Head, right	Horse, right	MD 1990	Area 5	N/A (Jackson no. 526)	stater	1716	BMC 182 type; CCI 97.1735	6.09	5–6
363.	NCM	2007.17	Head, right	Horse, right	MD 2003–9	Woodland	N/A	stater (plated)	1719	Cf BMC 186 type	3.55	5–6
364.	NCM	2007.21	Stylised boar	Reversed S-shaped design	MD 2003–9	Woodland	N/A	quarter stater (scyphate)	1770 var.	BMC 3187 var. (reversed S)	0.59 (frag)	5–6
365.	BM	1991,0904.11	Stylised boar, right.	S-shaped design	MD 1990	Area 4	N/A (Jackson no. 521)	quarter stater (scyphate)	1770	BMC: 3187; CCI 96.1300	1.49	5–6
366.	BM	2009,4213.13	Boar, right	Horse, left	MD 1991	Area 26	ST/EL	silver unit	1782	BMC 3200 type	1.23 (incomplete)	6–8
367.	NCM	2009.7	Boar, right	Horse, right	MD 2003–9	Woodland	N/A	silver unit	1800		0.98 (incomplete)	6

British Iron Age Kent (potins) (Cat. nos 368–409)[42]

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
368.	BM	2009,4213.18	Head, left	Bull butting right	MD 1991	Area 21	ST/GU	potin	120	Kentish Primary (BMC 660 type)	3.55	2
369.	NCM	2003.1	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.07	2
370.	NCM	2003.2	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	4.84	2
371.	NCM	2003.3	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	4.22	2
372.	NCM	2003.4	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	4.03	2
373.	NCM	2003.8	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.58	2
374.	NCM	2003.9	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	4.10	2
375.	NCM	2003.10	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.57	2
376.	NCM	2003.11	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.39	2
377.	NCM	2003.12	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.15 (incomplete)	2
378.	NCM	2005.3	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.14	2
379.	NCM	2005.4	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.34	2
380.	NCM	2005.5	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.44	2
381.	NCM	2005.6	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.65	2
382.	NCM	2005.7	Head, left	Bull butting right. MA above	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.47	2

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
383.	NCM	2005.8	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	2.05	2
384.	NCM	2005.9	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.90	2
385.	NCM	2005.10	Head, left	Bull butting right (probably)	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	2.80	2
386.	NCM	2005.11	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	4.26	2
387.	NCM	2005.12	Head	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.79	2
388.	NCM	2005.13	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	2.18 (incomplete)	2
389.	NCM	2005.14	Head	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	4.01	2
390.	NCM	2005.15	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.38	2
391.	NCM	2005.16	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.51	2
392.	NCM	2005.17	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	3.93	2
393.	NCM	2005.18	Head	Bull butting right	MD 2003–9	Woodland	N/A	potin	cf 120	Kentish Primary	2.81	2
394.	NCM	2007.58	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	3.92	2
395.	NCM	2007.59	Head, left	Bull butting right	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	3.28	2
396.	NCM	2007.60	Head	Bull butting right	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	1.31	2
397.	NCM	2007.61	Head	Bull	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	2.72 (incomplete)	2
398.	NCM	2007.62	Head	Bull butting right	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	2.88 (incomplete)	2
399.	NCM	2007.63	Head, left	Bull	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	2.78 (incomplete)	2
400.	NCM	2007.64	Head	Bull	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	2.80 (incomplete)	2
401.	NCM	2009.1	Head, left	Bull, right. MA above	MD 2003–9	Woodland	N/A	potin	Cf 120	Kentish Primary	4.25	2
402.	NCM	2007.65	Head, right	Bull, left	MD 2003–9	Woodland	N/A	potin	cf 171	Flat Linear,[43] Holman F3/3-2 type	1.42	4–5
403.	BM	1991,1018.10	Stylised head, right	Stylised bull butting left	MD 1990	Area 1	SN/JS	potin	171	BMC 686 type; Holman F2/3-2c type[44]	1.58	4–5
404.	BM	1991,1018.11	Stylised head, right	Stylised bull butting right	Found on spoil heap 1990	?Area 4 (position on plan approximate)	SN/KJ	potin	165	BMC 705 type; Holman E3/4-2c type[45]	1.17	4
405.	BM	2009,4213.16	Stylised head, left	Stylised bull butting left	MD 1991	Area 26	ST/JB	potin	165	BMC 681 type; Holman D6/1-2 type	1.58	3

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
406.	BM	2009,4213.17	Stylised head, right	Stylised bull butting left	MD 1991	Area 3	ST/AU	potin	171	BMC 686 type; Holman F2/3-2a var.[46]	1.35 g	4–5
407.	BM	2009,4213.22	Stylised head, right	Stylised bull butting left	MD 1990–1	Area 25	N/A	potin	171	BMC 686 type; Holman F2/3-11b type	1.80	4–5
408.	BM	2009,4213.23	Stylised head, right	Stylised bull butting left	MD 1990–1	Area 4	N/A	potin	171	BMC 686 type; Holman F2/3-2b or c type	1.26 (incomplete)	4–5
409.	BM	2009,4213.25	Stylised head, left	Stylised bull butting right	MD 1990–1	Area 7	N/A	potin	150	BMC 711 type; Holman B3/2-3c type	1.64	2

Uncertain Iron Age coins (Cat. nos 410–14)

Cat. no.	Museum	Reg. no.	Obverse	Reverse	Disc.	Area	Site code	Denom.	*ABC*	Other refs	Wt (g)	Period
410.	BM	2009,4213.26	Illegible	Illegible	MD 1990–1	Area 13	N/A	Possible core of plated stater	uncertain		3.22	?
411.	BM	1991,1016.1	Illegible	Illegible	MD 1990	?Area 4 (findspot not plotted)	N/A (Jackson no. 525)	Possible core of plated stater	uncertain		1.21	?
412.	NCM	2003.39	Illegible	Illegible	MD 2003–9	Woodland	N/A	Possible core of plated quarter stater	uncertain	Possibly Insular Cf	0.87	?
413.	NCM	2009.6	Coin 1: Illegible. Coin 2: Boar, right	Coin 1: Illegible. Coin 2: Illegible	MD 2003–9	Woodland	N/A	Silver units, two fused together	uncertain	East Anglian or North-Eastern	0.92	?
414.	NCM	2009.9	Illegible	Illegible	MD 2003–9	Woodland	N/A	Possible core of plated silver unit	uncertain[47]		0.70	?

Cat. no.	Museum	Reg. no.	Disc.	Area	Site code	Issuer	Obverse	Reverse	Ref.	Date (AD unless otherwise stated)	Wt (g)	Denom.	Reece period
415.	NCM	2007.66	MD 2003–9	Woodland	N/A	A. Postumius Albinus	Bust of Diana right	A·POST·A·F·S·N·ALBIN Sacrificial scene	*RRC* 372/1	81 BC	1.85	*denarius serratus*	1
416.	BM	1991,1018.12	MD 1990	Area 5	SN/ KN	Nero (possibly)	Head of emperor (Nero?) right	Seated figure (Securitas?), right	Uncertain	*c.* 54–68	6.70	*dupondius / as*	3
417.	NCM	2005.54	MD 2003–9	Woodland	N/A	Vespasian	[IMP] CAES VESP AVG […] Head of Vespasian, laureate, right	Vespasian seated right	cf. *RIC* 2.1: 545, p.98	73	2.43	*denarius*	4
418.	BM	2009,4213.64	MD 1991	Area 20	ST/CB	Vespasian	[IMP CAES VESP] ASIAN AVG COS VIII Head of Vespasian, radiate, right; globe at point of bust	S C (in field) Pax standing left, sacrificing at altar and holding branch in left hand	*RIC* 2.1: 1143, p.142. Mint of Lugdunum	71	8.33	*dupondius*	4
419.	NCM	2005.55	MD 2003–9	Woodland	N/A	Domitian	IMP CAES DOMITIAN AVG GERM COS X[I] Head of Domitian, radiate, right, with aegis	[FIDEI] PVBLICAE Fides standing left	*RIC* 2.1: 289, p.285	85	7.87	*dupondius*	4
420.	BM	2009,4213.65	MD 1991	Area 23	ST/DK	Domitian (possibly)	Head (of Domitian?), right	Illegible	Uncertain	*c.* 69–96	3.74	*dupondius / as*	4?
421.	BM	2009,4213.66	MD 1991	Area 22	ST/CK	Trajan	[IMP CAES NER TRAIANO OPTIMO AVG GE]R DAC PARTHICO P M [TR P COS VI P P] Bust of Trajan, laureate, [draped], right	[IMP CAES NER TRAIANO OPTIMO AVG GE]R DAC PARTHICO P M [TR P COS VI P P]; PROVIDENTIA AVGVSTI S P Q R, S C (in field), Providentia standing left	*RIC* 2: 663, p.291	116–117	16.21	*sestertius*	5
422.	BM	2009,4213.36	MD 1991	Area 20	ST/BO	Trajan	Laureate head of Trajan, right	Illegible	Uncertain	98–117	15.90	*sestertius*	5
423.	BM	2009,4213.37	MD 1991	Area 25	ST/EK	Trajan	IMP CAES NERVAE TRAIANO AVG GER DAC [P M TR P COS VI P P] Bust of Trajan, radiate, draped, right	S P Q R OPTIMO PRINCIPI // VIA TRAIANA / S C Via Traiana reclining left on rocks, head right, holding wheel in right hand and branch in left hand	*RIC* 2: 641, p.289 (var.)	112–114 (?)	11.02	*dupondius*	5
424.	BM	2009,4213.39	MD 1991	Area 20	ST/BT	Hadrian	[IMP CAESAR TRA] IANVS HAD[RIANVS AVG] Laureate bust of Hadrian with right shoulder and chest bare, but drapery on his left shoulder, facing right	Illegible; // ADVENTVS AVG / S C (in ex.) Roma seated right, holding a vertical spear and clasping right hands with Hadrian, standing left	*RIC* 2.3, p.87 no. 158. BMC3: 1123 type	118	15.58 (loss on edge)	*sestertius*	6
425.	BM	2009,4213.38	MD 1991	Area 27	ST/GN	Hadrian	HADRIANVS AVGVSTVS Bust of Hadrian, laureate, right, drapery on left shoulder	COS [III] Roma, standing left, holding Victory and spear	*RIC* 2.3, p.123 no. 722; BMC3: 361 type	124–7	2.90	*denarius*	6
426.	BM	1991,1018.13	MD 1990	Area 1	SN/ BB	Hadrian (probably)	Head of emperor (Hadrian?), right	Illegible	Uncertain	117–138 (?)	5.66	*as* (probably)	?6

Cat. no.	Museum	Reg. no.	Disc.	Area	Site code	Issuer	Obverse	Reverse	Ref.	Date (AD unless otherwise stated)	Wt (g)	Denom.	Reece period
427.	BM	2009,4213.41	MD 1991	Area 17	ST/AL	Hadrian	Radiate (?) bust of Hadrian, right	Fortuna (?) seated left with rudder and cornucopiae.	Uncertain	117–138	4.82	*dupondius* (probably)	6
428.	BM	2009,4213.40	MD 1991	Area 24	ST/DU	Hadrian (possibly)	Head, right	Illegible	Uncertain	*c.* 100–200	18.23	*sestertius*	?6
429.	BM	1991,1018.15	MD 1990	Area 1	SN/BA	Antoninus Pius	[ANTONINVS AVG] PIVS P P TR P XVIII Radiate head of Antoninus Pius, right	[LIB]E[RTAS] COS IIII; S C (in field) Libertas standing right, holding pileus	*RIC* 3: 932, p.142; BMC4 1967, p.330 type	154–155	9.82	*dupondius*	7
430.	BM	2009,4213.29	MD 1992	Just east of stripped area	SM/AI	Antoninus Pius (possibly)	Laureate head, right	Uncertain standing female figure	Uncertain	*c.* 43–192	15.30	*sestertius*	?7
431.	BM	2009,4213.42	MD 1991	Just east of stripped area	ST/CJ	Antoninus Pius	Laureate head of Antoninus Pius, right	Uncertain standing figure	Uncertain	138–161	15.55	*sestertius*	7
432.	BM	2009,4213.44	MD 1991	Area 26	ST/FN	Antoninus Pius	DIVA FAVSTINA Bust of Faustina I, right	AED DIV FAVSTINAE Hexastyle temple; standing figure in temple	*RIC* 3: 343, p.69; BMC4 339, p.52 type	141–161	2.60	*denarius*	7
433.	NCM	2007.68	MD 2003–9	Woodland	N/A	Marcus Aurelius (as Caesar under Antoninus Pius)	AVRELIVS CAESAR AVG PII F Head of Marcus Aurelius, right	COS II Honos standing left	*RIC* 3: 429a; BMC 595 type	145–160	2.20	*denarius*	7
434.	NCM	2007.69	MD 2003–9	Woodland	N/A	Antoninus Pius	Head of emperor, right	Illegible. Standing figure	Uncertain	*c.* 138–161	5.78	*dupondius / as*	7
435.	BM	2009,4213.46	Stray find 1991, made during backfilling	?Area 4 (position on plan approximate)	ST/JA	Marcus Aurelius and Lucius Verus	DIVVS ANTON[INV]S Head of deified Antoninus Pius, bare, right	DIVO [PIO]; S C (in field), Column on base, surmounted by statue of Divus Antonius	*RIC* 3: 1269, p.315; BMC4: 880, p.526 type	*c.* 161–169	16.70	*sestertius*	8
436.	BM	2009,4213.28	MD 1992	South of 'gold field'	SA/JQ	Commodus (possibly)	Laureate, draped bust, right	Uncertain standing female figure	Uncertain	*c.* 138–211	19.51	*sestertius*	?9
437.	BM	2009,4213.47	MD 1991	Area 21	ST/GX	Uncertain Antonine emperor	Radiate head of Antonine emperor, right	Illegible	Uncertain	*c.* 138–192	4.61	*dupondius*	7–9
438.	BM	1991,1018.14	MD 1990	Area 1	SN/AY	Uncertain Antonine empress	Bust of uncertain Antonine empress, right	Illegible	Uncertain	*c.* 138–192	6.79	*dupondius / as* (possibly)	7–9
439.	BM	1991,1018.16	MD 1990	Area 2	SN/EM	Uncertain Antonine emperor	Head of uncertain Antonine emperor, right	Standing figure	Uncertain	*c.* 138–192	11.75	*sestertius* (probably)	7–9
440.	BM	2009,4213.43	MD 1991	Area 26	ST/FR	Uncertain Antonine emperor	Head (or bust) of uncertain Antonine emperor, laureate, right	Draped female figure standing left.	Uncertain	*c.* 138–192	17.48	*sestertius*	7–9
441.	BM	2009,4213.45	MD 1991	Area 23	ST/DJ	Uncertain Antonine empress	Draped bust of uncertain Antonine empress, right	Standing female figure	Uncertain	*c.* 138–192)	18.14	*sestertius*	7–9
442.	NCM	2007.67	MD 2003–9	Woodland	N/A	Julia Domna under Septimius Severus	IVLIA AVGVSTA Draped bust, right	FELICITAS Felicitas standing left	*RIC* 4: 551, p.167	196–211	2.44	*denarius*	10

Cat. no.	Museum	Reg. no.	Disc.	Area	Site code	Issuer	Obverse	Reverse	Ref.	Date (AD unless otherwise stated)	Wt (g)	Denom.	Reece period
443.	NCM	2007.70	MD 2003–9	Woodland	N/A	Uncertain	Head, right	Illegible	Uncertain		4.93	*dupondius / as*	1–11
444.	NCM	2007.71	MD 2003–9	Woodland	N/A	Uncertain	Head, right	Standing figure	Uncertain		6.10	*dupondius / as*	1–11
445.	NCM	2007.72	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Illegible	Uncertain		3.89	*dupondius / as*	1–11
446.	NCM	2007.73	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Illegible	Uncertain		5.82	*dupondius / as*	1–11
447.	BM	2009,4213.53	MD 1991	Area 22	ST/CD	Uncertain	Illegible	Illegible	Uncertain	*c.* 50–300	14.92	*sestertius*	1–11
448.	BM	2009,4213.56	MD 1991	Area 20	ST/BY	Uncertain	Radiate head, right	Illegible	Uncertain	*c.* 50–300	5.73	*dupondius*	1–11
449.	BM	2009,4213.58	MD 1991	Area 20	ST/BU	Uncertain	Radiate head, right	Standing figure.	Uncertain	*c.* 50–300	5.51	*dupondius / as*	1–11
450.	BM	2009,4213.54	MD 1991	Area 24	ST/DS	Uncertain	Illegible	Illegible	Uncertain	*c.* 50–300	6.93	*dupondius / as* (probably)	1–11
451.	BM	2009,4213.55	MD 1991	Area 22	ST/CO	Uncertain	Illegible	Uncertain standing figure	Uncertain	*c.* 50–300	6.89	*dupondius / as* (probably)	1–11
452.	BM	2009,4213.57	MD 1991	Area 23	ST/DD	Uncertain	Illegible	Illegible	Uncertain	*c.* 50–300	3.11	*dupondius / as* (possibly)	1–11
453.	BM	2009,4213.59	MD 1991	Area 20	ST/BZ	Uncertain	Head, right	Illegible	Uncertain	*c.* 50–300	5.83	*dupondius / as* (probably)	1–11
454.	BM	2009,4213.60	MD 1991	Area 18	ST/AW	Uncertain	Head, right	Uncertain figure, possibly Virtus standing right with spear and parazonium	Uncertain	*c.* 50–300	4.48	*dupondius / as*	1–11
455.	BM	2009,4213.61	MD 1991	Area 22	ST/CM	Uncertain	Head, right	Illegible	Uncertain	*c.* 50–300	4.53	*dupondius / as*	1–11
456.	BM	2009,4213.30	MD 1992	South of 'gold field'	SA/JR	Uncertain	Head, right	Illegible	Uncertain	*c.* 1–200	3.41	*dupondius / as*	1–11
457.	BM	2018,4117.1	MD 1990	N/A	N/A	Uncertain	Illegible	Illegible	Uncertain	*c.* 1–200	2.48 (incomplete)	*dupondius / as* (cut half)	1–11
458.	NCM	2007.83	MD 2003–9	Woodland	N/A	Valerian and Gallienus (joint reign)	Radiate of Valerian II as Caesar / D2 bust	IOVI CRESCENTI (Jupiter)	*Cunetio* 738; *RIC* 3: mint of Gaul	255	2.27	radiate	12
459.	BM	2009,4213.48	MD 1991	Area 22	ST/CL	Tetricus I	[…T]ETRIC[VS...] Radiate bust of Tetricus I, right	Standing female figure (Pax?)	Uncertain	271–274	1.77	radiate	13
460.	NCM	2007.81	MD 2003–9	Woodland	N/A	Carausius	Carausius (radiate, cuirassed, draped, right.) IMP C CAR[…]	Pax standing left holding vertical sceptre	Uncertain	*c.* 286–293	1.09	radiate	14
461.	NCM	2007.82	MD 2003–9	Woodland	N/A	Carausius	No details	No details	*RIC* 5.2: 12, p.464	*c.* 286–293	3.27	radiate	14
462.	NCM	2007.85	MD 2003–9	Woodland	N/A	Carausius?	No details	Female figure(s) standing left	Uncertain	*c.* 286–293	0.58 incomplete	radiate	14
463.	BM	2009,4213.49	MD 1991	Area 25	ST/EJ	Uncertain Allectus?	[IMP C A…] Radiate bust, right	Illegible (mintmark in exergue). Laetitia (?) standing left	Uncertain	*c.* 293–296	1.68 (incomplete)	radiate	14
464.	NCM	2007.84	MD 2003–9	Woodland	N/A	Victorinus	Illegible	Sol Invictus prototype	*Cunetio* 2958	*c.* 275–285	0.58	radiate (i)	14
465.	NCM	2007.79	MD 2003–9	Woodland	N/A	Irregular	Illegible	Standing female figure	Uncertain	*c.* 275–285	0.82	radiate (i)	14
466.	NCM	2007.80	MD 2003–9	Woodland	N/A	Irregular	Illegible	Standing figure	Uncertain	*c.* 275–285	0.14	radiate? (i) small module	14
467.	NCM	2005.60	MD 2003–9	Woodland	N/A	Irregular	Head, right	Standing figure	Irregular	*c.* 275–285	0.45	radiate (i)	14

Cat. no.	Museum	Reg. no.	Disc.	Area	Site code	Issuer	Obverse	Reverse	Ref	Date (AD unless otherwise stated)	Wt (g)	Denom.	Reece period
468.	NCM	2005.61	MD 2003–9	Woodland	N/A	Irregular	Head, right	Standing figure	Irregular	*c.* 275–285	0.85	radiate (i)	14
469.	NCM	2007.86	MD 2003–9	Woodland	N/A	House of Constantine	Constantinopolis	Victory standing left on prow	Irregular, cf. Boon 127	330–340	1.54	*nummus* (i)	17
470.	NCM	2005.57	MD 2003–9	Woodland	N/A	House of Constantine	Illegible	GLORIA EXERCITVS one standard	Uncertain mintmark	335–341	1.51	*nummus*	17
471.	BM	2009,4213.31	Exc. 1992	Enclosure ditch, Trench 5, SA5/2, Section G, Layer 3	SA/BG	Constans	[CON]STAN[...] Head (or bust), diademed, right	[VICTORIAE DD AVGGQ NN]; mintmark: Є //TRS, Two Victories	*RIC* 8: 197–9, p.152. Trier mint	347–348	0.52 (incomplete)	*nummus*	17
472.	BM	2009,4213.34	Exc. 1992	Enclosure ditch, Trench 5, SA5/2, Section B, Layer 3	SA/AT	Constans	[C]ONSTAN [...] Bust of Constans, right, draped and diademed	[VICTORIA]E DD NN AVGGQ N[N]; mintmark: D //[TR.], Two Victories	*RIC* 8: 193, p.152. Trier mint	347–348	0.60 (incomplete)	*nummus*	17
473.	BM	2009,4213.35	Exc. 1992	Enclosure ditch, Trench 5, SA5/2, Section B, Layer 3	SA/AO	Constans or Constantius II	CONS[...] Bust of emperor, right, draped and diademed	[VICTORIAE DD NN AVG] GQ NN; mintmark: branch// T[R.], Two Victories	*RIC* 8: 203–11, p.152. Trier mint	347–348	0.48 (incomplete)	*nummus*	17
474.	NCM	2005.58	MD 2003–9	Woodland	N/A	House of Constantine	Illegible, bust right	[VICTORIAE DD AVGG Q NN], M (in field). Two Victories	Mint of Trier	343–348	0.79	*nummus*	17
475.	NCM	2005.64	MD 2003–9	Woodland	N/A	House of Constantine	Illegible	Two Victories?	Irregular	347–348	0.52	*nummus* (i)	17
476.	BM	2009,4213.50	MD 1991	Area 27	ST/GK	Magnentius	A (behind bust); [DN] MAG[...] Draped, bare-headed bust of Magnentius, right	GLO[RIA ROMANORVM; mintmark // [T]R[.] crescent Soldier galloping right spearing fallen victim	*RIC* 8: 271, p.158. Trier mint	*c.* 350–351	1.62 (half)	*nummus* (cut half)	18
477.	BM	1991,1018.17	MD 1990	Area 7	SN/MU	Magnentius	Illegible. A behind head. Bust of Magnentius, bare-headed, right	Two Victories holding wreath inscribed VOT / V / MVLT / X surmounted by Chi-Rho	Uncertain	350–353	2.33	*nummus*	18
478.	BM	2009,4213.33	Exc. 1992	Enclosure ditch, Trench 5, SA5/2, Section B, Layer 3	SA/AM	Magnentius	DN [...] Draped bust of Magnentius, bare-headed, right	VICTORA (sic) DD NN AVG ET CAE[S] Two Victories with wreath inscribed VOT / [V] / VLT / [X]	Irregular	*c.* 351–353	1.23	*nummus* (i)	18
479.	BM	2009,4213.32	MD 1992	Woodland	SM/AD	House of Constantine	Draped and diademed bust, right	Soldier spearing fallen horseman	Irregular	*c.* 348–361	0.74	*nummus* (i)	18
480.	NCM	2005.62	MD 2003–9	Woodland	N/A	House of Constantine	Illegible	Soldier spearing fallen horseman	Irregular	*c.* 355–364	0.35	*nummus* (i)	18
481.	NCM	2005.63	MD 2003–9	Woodland	N/A	House of Constantine	Illegible	Soldier spearing fallen horseman	Irregular	*c.* 355–364	0.48	*nummus* (i)	18

Cat. no.	Museum	Reg. no.	Disc.	Area	Site code	Issuer	Obverse	Reverse	Ref.	Date (AD unless otherwise stated)	Wt (g)	Denom.	Reece period
482.	NCM	2003.40	MD 2003–9	Woodland	N/A	House of Constantine	Bust right, letter behind head	Soldier spearing fallen horseman	Irregular	*c.* 355–364	0.72	*nummus* (i)	18
483.	BM	2009,4213.51	MD 1991	Area 21	ST/GY	Valens	DN VALEN [S P F AVG] Diademed bust of Valens, right	GLORIA ROMANORVM; mintmark: [O] / F I//[…] Emperor advancing right, holding standard and dragging captive	*RIC* 9: 10b, p.44. Lyon mint	364–367	2.65	*nummus*	19
484.	NCM	2007.87	MD 2003–9	Woodland	N/A	House of Valentinian	Illegible	SECVRITAS REIPVBLICAE, Victory standing left. [O]F / [.]// […]?	Uncertain	364–378	1.07	*nummus*	19
485.	NCM	2005.56	MD 2003–9	Woodland	N/A	Gratian	D N GRATIAN[VS…] AVG Bust, right	VOT XV / MVLT [X X] // LVG[S] Inscription in wreath	Lyon mint cf. *RIC* 9: p.48, no. 30a	378–383	1.57	*nummus*	20
486.	NCM	2007.88	MD	Woodland	N/A	Honorius	Illegible	VICTORIA AVGGG Victory advancing left	Western mint	393–5	1.06	*nummus*	21
487.	NCM	2005.59	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Illegible (late)	Uncertain	*c.* 348–402	1.15	*nummus*	18–21?
488.	BM	2009,4213.52	MD 1991	Area 26	ST/FP	Uncertain	Illegible	Illegible	Uncertain	*c.* 296–400	3.23	*nummus* (probably)	15–21
489.	BM	1991,1018.18	MD 1990	Area 7	SN/MJ	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	0.68	radiate or *nummus*	13–21
490.	BM	1991,1018.19	MD 1990	Area 2	SN/EJ	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	0.36	radiate or *nummus*	13–21
491.	BM	2009,4213.62	MD 1991	Area 22	ST/CN	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	1.63	radiate or *nummus*	13–21
492.	BM	2009,4213.63	MD 1991	Area 23	ST/DA	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	0.96	radiate or *nummus*	13–21
493.	NCM	2007.74	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	0.90	radiate or *nummus*	13–21
494.	NCM	2007.75	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	0.21	radiate or *nummus*	13–21
495.	NCM	2007.76	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	0.48	radiate or *nummus*	13–21
496.	NCM	2007.77	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Illegible	Uncertain	*c.* 260–400	0.58	radiate or *nummus*	13–21
497.	NCM	2007.78	MD 2003–9	Woodland	N/A	Uncertain	Illegible	Possibly falling horseman?	Uncertain	*c.* 260–400	0.41	radiate (i) or *nummus* (i) small module	13–21

UNCERTAIN IRON AGE OR ROMAN COINS (Cat. nos 498–507)

Cat. no.	Museum	Reg. no.	Disc.	Area	Site code	Obverse	Reverse	Description	Wt (g)
498.	NCM	2007.89	MD 2003–9	Woodland	N/A	Illegible	Illegible	Uncertain Roman or Iron Age	1.16
499.	NCM	2007.90	MD 2003–9	Woodland	N/A	Illegible	Illegible	Uncertain possibly Iron Age	1.77
500.	NCM	2007.91	MD 2003–9	Woodland	N/A	Illegible	Illegible	Uncertain possibly Roman	1.11
501.	NCM	2007.92	MD 2003–9	Woodland	N/A	Illegible	Illegible	Uncertain copper alloy coin	1.41
502.	NCM	2007.93	MD 2003–9	Woodland	N/A	Illegible	Illegible	Uncertain possibly Roman	0.42
503.	NCM	2007.94	MD 2003–9	Woodland	N/A	Illegible	Illegible	Roman fragment	1.01
504.	NCM	2007.95	MD 2003–9	Woodland	N/A	Illegible	Illegible	Silver or copper alloy coin fragment or droplet (not seen at NCM)	0.36
505.	NCM	2007.96	MD 2003–9	Woodland	N/A	Illegible	Illegible	Possible potin fragment	1.24
506.	BM	2018,4117.2	Exc. 1991	Area 21, enclosure ditch ST35, Layer 1	ST/EX	Illegible	Illegible	Uncertain Roman or Iron Age copper alloy coin with adhering organics (mineralised fern frond)	2.98
507.	NCM	2003.38	MD 2003–9	Woodland	N/A	Illegible	Illegible	Possible core of plated coin, but iron corrosion products visible	1.21

Notes

1 Classifications from Sills 2003 where applicable.

2 Published weights in CCI, Clarke 1954 and Sills 2003, 376 are 7.10g for Clarke 1 and 6.03g for Clarke no. 2. The weights in the text and the plates in Clarke 1954 do not correspond; the numbering used in this catalogue relates to plate XIV. That publication appears to be the source of the CCI weights. This coin, however, has the appearance of a plated copy, although surface analysis by Northover (1992, 281) indicated a (possibly anomalously) high gold content for the coin weighing 7.10, listed (*ibid.*) as coin 1 from the hoard. The discrepancy in the weights for cat. no. 2 cannot be explained (Northover also gives 6.03g and it therefore seems that they were not re-weighed for that analysis).

3 Weight recorded as 5.52 in Clarke 1954 and CCI.

4 Weight recorded as 6.51 in Clarke 1954 and CCI, as no. 11.

5 Weight recorded as 6.18 in Clarke 1954 and CCI, as no. 9.

6 Sills (2003, 376) describes this as hammered out and possibly GB Ab1 cl 7 or GB E Class 1–3, 60.2% fine Au.

7 Sills (*ibid.*) describes this as hammered out and probably GB A or B, 71.6% fine Au.

8 Listed in error in Sills 2003, 376 as at NCM, but the NCM coin (1951.93.2, CCI 61.0327 1.55g) is an electrotype of this coin. The coin has unusual patterns of wear on the obverse.

9 Described by Sills 2003, 157 and 377 as an insular copy or plated. No analysis has been carried out to confirm this.

10 Sills and de Jersey have weights for 1991,0904.2, .3 and .4 assigned to different coins. Image on CCI for 94.1702 matches coin .4 and 94.1700 coin .3 but weights reversed.

11 Listed with site finds and not Hoard N by de Jersey.

12 Eleanor Ghey is grateful to John Sills for identifying this coin. He notes that it is a very worn product from a flawed die shared with CCI 12.0278, 07.0350, 15.0310 and 15.0311, the last three with findspots in West Sussex, Essex and Kent respectively.

13 Suggested to be ABC 1414 or 1420, but likely candidates not identified in CCI.

14 This type would traditionally be described as a Whaddon Chase stater, but Sills suggests that it may be a derivative Trinovantian issue (see entry for *ABC* 2338).

15 Weights are provided at www.finds.org.uk/CCI.

16 Described by John Talbot (pers. comm.) as a 'hubbed, plated Saenu/Ecen mule' (a hubbed die is a die made from an existing coin, generally thought to be a forgery).

17 In addition to the coins listed here, Michael Trenerry offered three groups of boar/horse units, apparently all of *ABC* 1582 type, in his lists of July/August 1992 (lot 72, 10 coins), July/August 1995 (lot 92, six coins), and May/June 1996 (lot 102, 33 coins). The coins are illustrated in heaps and no attempt has been made here to identify individual coins, or to ascertain whether any are repeated through the lots. There are also many more *ABC* 1564/1567 coins from the Bowl Hoard identified in various auction catalogues of the early and mid-1990s, but at the time of compiling (in 2015) these had not yet been allotted CCI numbers and thus they are not included here. The same observation applies to the ECEN and ECE types, and to a lesser extent to AESV and SAENV.

18 Inscriptions generally off the flan.

19 Additional examples of North-Eastern silver from the Bowl Hoard, both inscribed and uninscribed, have now been identified in auction catalogues of the mid-1990s, but at the time of writing these had not yet been included in the CCI and consequently they are not listed here.

20 Coins 2003.5 to .7 initially listed as Kentish Primary potins but removed to this section on account of their high weight. Many of the Kentish Primary potins are corroded or require cleaning and identification must remain inconclusive.

21 With thanks to Philip Kinns and Marie-Christine Marcellesi for this identification of a previously unrecorded magistrate, perhaps Kleisipp[ides] or Kleisipp[os].

22 Sills 2003, 377 also lists an unreported Gallo-Belgic Ab1 Class 2 (plated?) stater sold by Freeman & Sear 14/1/1998 lot 12, 5.77g CCI 98.0232.

23 The surface of coins 2007.5–9 is covered with what appears to be melted silver (see **Fig. 15.6** and wider discussion of heating in Ch. 20). In some cases, it is unclear if this is an underlying core (as apparent for 2007.11) or overlying the surface. The metal is paler than that of 2007.10 and 2005.19. No analysis has been carried out. The similar treatment might suggest that the coins were originally deposited together. As far as it has been possible to make out detail these coins correspond to Sills 2017, 15 type 25 to 26.

24 De Jersey 2014, 311 surface find III no. 2. appears to be this coin. Listed by Sills 2003, 377 as seen at the BM in 1989.

25 Reclassified from Sills 2003, 377 British Ao quarter mint B.

26 Reclassified from Sills 2003, 377 British Ao quarter mint B. This is listed by de Jersey 2014, 311 as surface find I. It is noted as coming from site 33. The British Ab2 Class 3 type is Talbot's Ingoldisthorpe quarter and may be attributed to East Anglia; this coin is the one referred to by Talbot as from Hoard B (2017, 12).

27 This group of coins is listed by Sills without weights as CCI 17.0279–84. The attribution of CCI numbers to particular coins may be incorrect as renumbering has occurred and they have not been checked against the CCI card index.

28 Listed as part of surface find III by de Jersey 2014, 311. Misshapen flan.

29 Analysed (see Appendix 4).

30 This is the coin referred to in de Jersey 2014, 315 note 355.

31 Recorded in BMC as a plated forgery, though analysis (see Appendix 4) did not find evidence that the coin was plated.

32 Analysis (see Appendix 4) suggests this coin is base but not plated.

33 Analysis (see Appendix 4) suggests this coin is base but not plated.

34 De Jersey 2014, 311 surface find III no. 4. appears to be this coin. It is the 'uncertain plated stater' recorded with the same date of discovery as surface finds 2 and 3. Coin no. 5, a silver East Anglian unit, does not appear on the list provided by NCM for this group.

35 The obverse is unclear. There is a wheel with spokes terminating in pellets above the horse as commonly seen in B (horse right). Possibly Bury D, F or H?

36 Talbot die-group 2.

37 Pellet triad below horse.

38 Pellet triad below horse.

39 Talbot's reverse 1 (2017, 207).

40 Cross below horse?

41 Triangle obverse as Talbot 2017, 173 G and H.

42 Including identifications of the Flat Linear potins by David Holman.

43 This is the additional potin referred to by Holman in the text as one further Flat Linear potin of type F3/3-2 found *c.* 2003.

44 Listed by de Jersey (2014) under Hoard F, no. 41.

45 Listed by de Jersey (2014) under Hoard F, no. 42.

46 Variant with two lines on neck.

47 John Talbot tentatively identified this as probably the core of a plated East Anglian Early Pattern Horse A unit.